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| 1.0.1 | 08/10/2019 | A. Carello | Align doc with the latests areas |
| 1.0.2 | 11/10/2019 | J. Casamonti | Changed slow meters alarms spare1 to Generic fault |
| 1.0.3 | 29/10/2019 | A. Carello | Add `0x1B` value to **ESC** character at Par 2.2<br>Add missing $x^{16}+x^{12}+x^5+1$ polynomial at Par 2.3 |
| 1.0.4 | 18/11/2019 | A. Carello | Add endianness example at Par 2 |
| 1.0.5 | 19/11/2019 | A. Carello | Add UDP port at Par 2 |
| 1.0.6 | 19/11/2019 | L. Fibucchi | Remove unused fields |
| 1.1.0 | 20/11/2019 | J. Casamonti | Added new source selection blocks and deprecate old ones. |
| 1.1.1 | 11/12/2019 | L. Fibucchi | Added Fault Code field |
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| 1.1.12 | 07/04/2020 | L. Fibucchi | Release candidate |
| 1.1.13 | 23/04/2020 | L. Fibucchi | Removed unused flag from pilotTone fields |
| 1.1.15 | 26/05/2020 | L. Fibucchi | Added load default parameters command |
| 1.1.17 | 16/06/2020 | L. Fibucchi | Added GPI scaled value and GPI config |
| 1.1.19 | 16/06/2020 | L. Fibucchi | Added Minijack anti-pop, mute flags, fault flags and GPO state |
| 1.1.21 | 18/06/2020 | L. Fibucchi | Added High Over Temperature field |
| 1.1.22 | 15/07/2020 | A. Carello | Remove bureaucratic section |
| 1.2.0 | 02/07/2020 | L. Fibucchi | Released version 1.2.0 |
| 1.2.2 | 21/07/2020 | L. Fibucchi | Removed unused fields in Ways Diagnostic |
| 1.2.3 | 18/09/2020 | L. Fibucchi | Added OEM empty spare area |
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# Bibliography

PWS00: , Telnet commands specifications, 2017

## 1. Purpose of this document

The purpose of this document is to depict communication protocol used to communicate with Mezzo MCU.

### 1.1 Definitions

**Equipment** or **amplifier** is the Mezzo
**Remote controller** is the software, running on a PC or on another device, that is enabled to communicate with Equipment

## 2. Protocol description

The protocol is structured as master/slave where the remote control program running on a PC is the master and the amplifier is slave.

Communication will take place on a LAN Ethernet infrastructure, and uses UDP packet. **All packets must be sent to UDP port 8002**
All data bigger than 1 byte are represented in **little endian** if not otherwise specified, please see the example below that explain the endianness.

**Example**   [ edit | edit wikitext ]

In the case of a WORD (16 bit), the number hexadecimal 0x0123 will be stored as:

```
        Little endian          Big endian
        +----+----+            +----+----+
        |0x23|0x01|            |0x01|0x23|
        +----+----+            +----+----+
  byte:   0    1                 0    1
```

## 2.1. Packet structure

The protocol is asymmetrical: the request end response frame are slightly different..

### 2.1.1. Request frame

All packets sent from PC to a device will be further defined request. A generic request packet is composed by the following fields:.

| Head | TAG | PBus command | ... | CRC16 | Tail |
|------|-----|--------------|-----|-------|------|
| 1 byte | 4 bytes | variable | ... | 2 bytes | 1 byte |

where:

- **Head** is a fixed value, corresponding to the ASCII code **STX (0x02)**.

- **TAG** is a binary tag to be echoed back into reply, used by software to associate the reply with the issued command.

- **PBus** command is a single encapsulation of a PBus operation. In a Pbus frame can be encapsulated more PBus command, this feature is called Multicommand. The PBus command will be explained in section Errore: sorgente del riferimento non trovata.

- **CRC16** is a 2 bytes value, computed as the rule presented in the paragraph ##. It is computed only on the grey part of the frame.

- **Tail** is a fixed value, corresponding to ASCII code **ETX (0x03)**.

Since some packets could contain binary data, an escaping strategy has been adopted, refer to the paragraph ## for more information. The escaping is adopted for the whole frame except Head and Tail. As a consequence CRC16 is computed before escaping.

A request packet can be as long as 2000 byte (plain bytes not escaped), as a consequence 1992 bytes are available for pbus commands.

### 2.1.2. Response frame

All packets received from the PC (sent by a device), will be further defined replies. A reply has always the same TAG of the command that generated it and has the following structure:

| Head | Magic | ProtocolID | TAG | PBus command | ... | CRC16 | Tail |
|------|-------|------------|-----|--------------|-----|-------|------|
|      | Number |           |     | Reply        | ... |       |      |
| 1 byte | 3 bytes | 2 bytes | 4 bytes | variable | ... | 2 bytes | 1 byte |

where:

- **Head** is a fixed value, corresponding to the ASCII code **STX (0x02)**.

- **Magic** Number is 3 byte field that must be populated with 'M', 'Z', 'O' (0x4D, 0x5A, 0x4F).

- **Protocol ID** is an identification of protocol frame such as version etc. Mezzo uses protocol identified by **0x0001**.

- **TAG** is a binary tag echoed back from the last issued command.

- **PBus command reply** is a single encapsulation of a PBus operation reply. In multicommand contest every PBus command encapsulated in a single protocol frame needs a PBus command reply encapsulated in a reply.

- **CRC16** is a 2 bytes value, computed as the rule presented in the paragraph Errore: sorgente del riferimento non trovata. It is computed only on the grey part of the frame.

- **Tail** is a fixed value, corresponding to ASCII code **ETX (0x03)**.

## 2.2. Escaping strategy

Since the protocol is binary some byte in the frame could assume the same value of **STX or ETX**, so an escaping strategy will take place.

In order to avoid the transmission of the special bytes **STX, ETX and ESC** an escaping strategy has been adopted.

In case a special byte is found within the packet, an **ESC (0x1B)** character is issued in the output buffer followed by the special byte incremented by **0x40** (i.e. **STX** becomes **ESC** followed by **0x42**, since 0x42 is the sum of STX [0x02] and 0x40).

The escaping strategy involves all fields of packets (request or response), excluding **Head** and **Tail**.

Below a code snippet shows an example of the escaping and un-escaping routines:

## 2.3 CRC16 computation

Each packet contains a CRC16. The checksum value is computed before applying the escaping strategy. The CRC algorithm is the CRC16-CCITT that uses $x^{16}+x^{12}+x^5+1$ polynomial

A code snippet used to compute CRC16 is provided below:

```c
const uint16_t crc16tab[256] = {
  0x0000, 0x1021, 0x2042, 0x3063, 0x4084, 0x50a5, 0x60c6, 0x70e7,
  0x8108, 0x9129, 0xa14a, 0xb16b, 0xc18c, 0xd1ad, 0xe1ce, 0xf1ef,
  0x1231, 0x0210, 0x3273, 0x2252, 0x52b5, 0x4294, 0x72f7, 0x62d6,
  0x9339, 0x8318, 0xb37b, 0xa35a, 0xd3bd, 0xc39c, 0xf3ff, 0xe3de,
  0x2462, 0x3443, 0x0420, 0x1401, 0x64e6, 0x74c7, 0x44a4, 0x5485,
  0xa56a, 0xb54b, 0x8528, 0x9509, 0xe5ee, 0xf5cf, 0xc5ac, 0xd58d,
  0x3653, 0x2672, 0x1611, 0x0630, 0x76d7, 0x66f6, 0x5695, 0x46b4,
  0xb75b, 0xa77a, 0x9719, 0x8738, 0xf7df, 0xe7fe, 0xd79d, 0xc7bc,
  0x48c4, 0x58e5, 0x6886, 0x78a7, 0x0840, 0x1861, 0x2802, 0x3823,
  0xc9cc, 0xd9ed, 0xe98e, 0xf9af, 0x8948, 0x9969, 0xa90a, 0xb92b,
  0x5af5, 0x4ad4, 0x7ab7, 0x6a96, 0x1a71, 0x0a50, 0x3a33, 0x2a12,
  0xdbfd, 0xcbdc, 0xfbbf, 0xeb9e, 0x9b79, 0x8b58, 0xbb3b, 0xab1a,
  0x6ca6, 0x7c87, 0x4ce4, 0x5cc5, 0x2c22, 0x3c03, 0x0c60, 0x1c41,
  0xedae, 0xfd8f, 0xcdec, 0xddcd, 0xad2a, 0xbd0b, 0x8d68, 0x9d49,
  0x7e97, 0x6eb6, 0x5ed5, 0x4ef4, 0x3e13, 0x2e32, 0x1e51, 0x0e70,
  0xff9f, 0xefbe, 0xdfdd, 0xcffc, 0xbf1b, 0xaf3a, 0x9f59, 0x8f78,
  0x9188, 0x81a9, 0xb1ca, 0xa1eb, 0xd10c, 0xc12d, 0xf14e, 0xe16f,
  0x1080, 0x00a1, 0x30c2, 0x20e3, 0x5004, 0x4025, 0x7046, 0x6067,
  0x83b9, 0x9398, 0xa3fb, 0xb3da, 0xc33d, 0xd31c, 0xe37f, 0xf35e,
  0x02b1, 0x1290, 0x22f3, 0x32d2, 0x4235, 0x5214, 0x6277, 0x7256,
  0xb5ea, 0xa5cb, 0x95a8, 0x8589, 0xf56e, 0xe54f, 0xd52c, 0xc50d,
  0x34e2, 0x24c3, 0x14a0, 0x0481, 0x7466, 0x6447, 0x5424, 0x4405,
  0xa7db, 0xb7fa, 0x8799, 0x97b8, 0xe75f, 0xf77e, 0xc71d, 0xd73c,
  0x26d3, 0x36f2, 0x0691, 0x16b0, 0x6657, 0x7676, 0x4615, 0x5634,
  0xd94c, 0xc96d, 0xf90e, 0xe92f, 0x99c8, 0x89e9, 0xb98a, 0xa9ab,
  0x5844, 0x4865, 0x7806, 0x6827, 0x18c0, 0x08e1, 0x3882, 0x28a3,
  0xcb7d, 0xdb5c, 0xeb3f, 0xfb1e, 0x8bf9, 0x9bd8, 0xabbb, 0xbb9a,
  0x4a75, 0x5a54, 0x6a37, 0x7a16, 0x0af1, 0x1ad0, 0x2ab3, 0x3a92,
  0xfd2e, 0xed0f, 0xdd6c, 0xcd4d, 0xbdaa, 0xad8b, 0x9de8, 0x8dc9,
  0x7c26, 0x6c07, 0x5c64, 0x4c45, 0x3ca2, 0x2c83, 0x1ce0, 0x0cc1,
  0xef1f, 0xff3e, 0xcf5d, 0xdf7c, 0xaf9b, 0xbfba, 0x8fd9, 0x9ff8,
  0x6e17, 0x7e36, 0x4e55, 0x5e74, 0x2e93, 0x3eb2, 0x0ed1, 0x1ef0
};

uint16_t crc16(uint16_t crc, const void *buffer, size_t len)
{
  const unsigned char *buf = (const unsigned char *)buffer;
  while(len--)
    crc = (crc16tab[((crc) >> 8) ^ ((unsigned char)(*buf++))] ^ ((crc) << 8))

  return crc;
}
```

A code snippet used to compute the crc table is provided below:

```c
/* the CRC polynomial. */
#define  P    0x1021

/* number of bits in CRC: don't change it. */
#define W 16

/* this the number of bits per char: don't change it. */
#define B 8

void initcrctab(void)
{
    int  b, v, i;

    for( b = 0; b <= (1<< B)-1; ++b )
    {
        for( v = b<<(W-B), i = B; --i >= 0; )
            v = v&0x8000 ? (v<<1)^P : v<<1;
        crc16tab[b] = v;
    }
}
```

# 3. PBus Commands

Pbus follows the memory mapped paradigm. That is to say that all values that can be read o write from Remote Control Program are grouped together in a logical basis. All values that affect a specific feature and have similar needs about access (read only or read/write, etc.) are grouped in a pbus **area**.

An application that run PBus protocol must defines an address space containing a number of areas that can be addressed by pbus command according to access constrains defined for the single areas.

The addresses are 32 bit wide.

The PBus command represent a generic operation. The operation is defined at least by an address (to refer into a defined area in the address space) and a length (to know the extent of the operation).

The PBus command encapsulated in both request and reply frame have the same structure:

| OPCODE | ADDR32 | SIZE32 | DATA |
|--------|--------|--------|------|
| 1 byte | 4 bytes | 4 bytes | variable |

- **OPCODE** is command (operation) code.

- **ADDR32** is address field as previously described. It represent "where" to apply command.

- **SIZE32** is the length (extent) of the operation.

- **DATA** is an optional field depending on the operation. It contain the data stream involved in the operation.

PBus requests with LEN 0 are forbidden; The LEN 0 is reserved in replies to indicate a **NAK**. For example suppose the equipment defines an area from 0x01030000 to 0x01030100; a PBus command can request an operation at address 0x01030050 and length 10; for that request a reply will take place. Instead if the request is at address 0x010300F0 and length is 100 the reply will be a NAK (in other words a pbus command reply with len 0).

In general a request defines an area (address + len) where an operation must be performed. This request area must be inclusive in a defined area, otherwise a NAK reply will be generated

## 3.1. Pbus Read Command 'R' (0x52)

PBus command for the read operation is:

| Field | Offset | Size | Description |
|-------|--------|------|-------------|
| OPCODE | 0 | 1 | 'R' (0x52) |
| ADDR32 | 1 | 4 | Address where to start reading. |
| SIZE32 | 5 | 4 | Length of data involved in the read |

Reply for read command is:

| Field | Offset | Size | Description |
|-------|--------|------|-------------|
| OPCODE | 0 | 1 | 'R' (0x52) |
| ADDR32 | 1 | 4 | The address where reading has take place. Is the same value of issue command |
| SIZE32 | 5 | 4 | Size of data stream involved in the read operation |
| DATA | 9 | SIZE32 | Data stream read back at address ADDR32 with length SIZE32. |

Note: if the operation cannot be performed reply will have SIZE32 0 and no DATA field. This is NAK condition.

Replies with SIZE32 different from issue command are not allowed.

Example of read command:

| STX | 2143A3FF | R | 00030100 | 00000004 | CRC16 | ETX |
|-----|----------|---|----------|----------|-------|-----|

Example of reply:

| STX | 4D5A4F | 0001 | 2143A3FF | R | 00030100 | 00000004 | 76E31003 | CRC16 | ETX |
|-----|--------|------|----------|---|----------|----------|----------|-------|-----|

Example of NAK reply:

| STX | 4D5A4F | 0001 | 2143A3FF | R | 00030100 | 00000000 | CRC16 | ETX |
|-----|--------|------|----------|---|----------|----------|-------|-----|

## 3.2. Pbus Write Command 'W' (0x57)

PBus command for the write operation is:

| Field | Offset | Size | Description |
|---|---|---|---|
| OPCODE | 0 | 1 | 'W' (0x57) |
| ADDR32 | 1 | 4 | Address where to start writing. |
| SIZE32 | 5 | 4 | Length of data involved in the write |
| DATA | 9 | SIZE32 | Data stream to be wrote at address ADDR32 with length SIZE32. |

Reply for write command is:

| Field | Offset | Size | Description |
|---|---|---|---|
| OPCODE | 0 | 1 | 'W' (0x57) |
| ADDR32 | 1 | 4 | The address where writing has take place. Is the same value of issue command |
| SIZE32 | 5 | 4 | Size of data stream involved in the write operation |

Note: if the operation cannot be performed reply will have SIZE32 0. This is NAK condition.

Replies with SIZE32 different from issued command are not allowed.

Example of write command:

| STX | 23D47F30 | W | B4022A00 | 00000001 | 3F | CRC16 | ETX |
|---|---|---|---|---|---|---|---|

Example of reply:

| STX | 4D5A4F | 0001 | 23D47F30 | W | B4022A00 | 00000001 | CRC16 | ETX |
|---|---|---|---|---|---|---|---|---|

Example of NAK reply:

| STX | 4D5A4F | 0001 | 23D47F30 | W | B4022A00 | 00000000 | CRC16 | ETX |
|---|---|---|---|---|---|---|---|---|

## 3.3. Pbus Erase Command 'E' (0x45)

PBus command for the erase operation is:

| Field | Offset | Size | Description |
|---|---|---|---|
| OPCODE | 0 | 1 | 'E' (0x45) |
| ADDR32 | 1 | 4 | Address where to start erasing. |
| SIZE32 | 5 | 4 | Length of data to be erased. |

Reply for write command is:

| Field | Offset | Size | Description |
|---|---|---|---|
| OPCODE | 0 | 1 | 'E' (0x45) |
| ADDR32 | 1 | 4 | The address where writing has take place. Is the same value of issue command |
| SIZE32 | 5 | 4 | Size of data stream involved in the write operation |

Note: if the operation cannot be performed reply will have SIZE32 0. This is NAK condition.

Replies with SIZE32 different from issued command are not allowed.

Example of erase command:

| STX | 930045F4 | E | 300FA030 | 00000120 | CRC16 | ETX |
|---|---|---|---|---|---|---|

Example of reply:

| STX | 4D5A4F | 0001 | 930045F4 | E | 300FA030 | 00000120 | CRC16 | ETX |
|---|---|---|---|---|---|---|---|

Example of NAK reply:

| STX | 4D5A4F | 0001 | 930045F4 | E | 300FA030 | 00000000 | CRC16 | ETX |
|---|---|---|---|---|---|---|---|

## 3.4. Pbus Crc Command 'C' (0x43)

PBus command for the crc operation is:

| Field | Offset | Size | Description |
|---|---|---|---|
| **OPCODE** | 0 | 1 | 'C' (0x43) |
| **ADDR32** | 1 | 4 | Address where to start CRC computing. |
| **SIZE32** | 5 | 4 | Length of data involved in computation of CRC |

Reply for write command is:

| Field | Offset | Size | Description |
|---|---|---|---|
| **OPCODE** | 0 | 1 | 'C' (0x43) |
| **ADDR32** | 1 | 4 | The address where writing has take place. Is the same value of issue command |
| **SIZE32** | 5 | 4 | Size of data stream involved in the write operation |
| **DATA (CRC16)** | 9 | 2 | CRC16 computed on data at address ADDR32 and length SIZE32. It is expressed in little endian. |

Note: if the operation cannot be performed reply will have SIZE32 0. This is NAK condition.

Replies with SIZE32 different from issued command are not allowed.

Example of crc command:

| STX | A2349AB4 | C | 00AF1000 | 00000400 | CRC16 | ETX |
|---|---|---|---|---|---|---|

Example of reply:

| STX | 4D5A4F | 0001 | A2349AB4 | C | 00AF1000 | 00000400 | C13A | CRC16 | ETX |
|---|---|---|---|---|---|---|---|---|---|

Example of NAK reply:

| STX | 4D5A4F | 0001 | A2349AB4 | C | 00AF1000 | 00000000 | CRC16 | ETX |
|---|---|---|---|---|---|---|---|---|

## 3.5. Protocol Frame Examples

For the subsequent examples suppose that equipment defines 3 only areas in his PBus address space:

| Unused | Area 1 (r--c) 0x00001000 ~ 0x00002000 | Area 2 (rw--) 0x00002000 ~ 0x00002010 | Unused | Area 3 (rwec) 0x00002300 ~ 0x00003000 | Unused |
|---|---|---|---|---|---|

Area 1 and Area 2 are adjoined, and all areas have different access right, that is to say that is forbidden to write in Area 1, or erase Area 2. Area 3 has full access rights.

The forthcoming examples shows some erroneous cases.

### 3.5.1. Example: operation not permitted

request

| STX | 764234A3 | W | 00001010 | 00000004 | 01234567 | CRC16 | ETX |
|---|---|---|---|---|---|---|---|

This request involves Area 1 (address 0x00001010) and generates a NAK reply because the write operation cannot be performed on Area 1; only read and crc operation are permitted for this area.

### 3.5.2. Example: operation across two areas

| STX | 5467A4CF | R | 00002000 | 00000400 | CRC16 | ETX |
|---|---|---|---|---|---|---|

The operation requested begins in Area 2 (0x00002000) but would finish in Area 3 (from 0x00002300 on).

| Unused | Area 1 (r--c) 0x00001000 ~ 0x00002000 | Area 2 (rw--) 0x00002000 ~ 0x00002010 | Unused | Area 3 (rwec) 0x00002300 ~ 0x00003000 | Unused |
|---|---|---|---|---|---|
| | | Read operation requested 0x00002000 ~ 0x000023FF | | | |

This is not allowed and generates a NAK reply. No matter if the request operation is permitted for all areas involved. Only one area can be involved in an operation.

### 3.5.3. Example: another operation across two areas

Request:

| STX | AA3426C3 | R | 00001FF0 | 00000200 | CRC16 | ETX |
|-----|----------|---|----------|----------|-------|-----|

The operation requested begins in Area 1 (0x00001FF0) but would finish in Area 2 (from 0x00002000 to 0x0000200F).

| Unused | Area 1 (r--c)<br>0x00001000 ~ 0x00002000 | Area 2 (rw--)<br>0x00002000 ~ 0x00002010 | Unused | Area 3 (rwec)<br>0x00002300 ~ 0x00003000 | Unused |
|--------|------------------------------------------|------------------------------------------|--------|------------------------------------------|--------|
| | Read operation requested<br>0x00002000 ~ 0x000023FF | | | | |
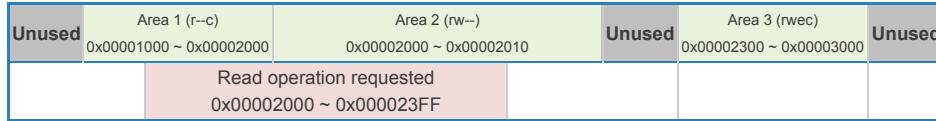
This is not allowed and generates a NAK reply. No matter if the request operation involve contiguous areas. Only one area can be involved in an operation.

### 3.5.4. Example: operation on unallocated address space

Request:

| STX | 34453D3C | C | 00004000 | 00000180 | CRC16 | ETX |
|-----|----------|---|----------|----------|-------|-----|

The address 0x04004000 is unallocated space. No areas are defined there, so this request generates a NAK reply.

### 3.5.5. Example: unknown operation

Request:

| STX | C1B8C3B0 | Q | 00001000 | 00000004 | 12A467A5 | CRC16 | ETX |
|-----|----------|---|----------|----------|----------|-------|-----|

The OPCODE is none of known operation ('R', 'W', 'E' or 'C'). It could be not possible to parse that frame (for example, we cannot know if data field is present or not, we know only for known opcode). We must consider it as a corrupted frame and no replies will be generated.

### 3.5.6. Example: malformed frame

Request:

| STX | DA7A3498 | C | 00001100 | 00000004 | 12A467A5 | CRC16 | ETX |
|-----|----------|---|----------|----------|----------|-------|-----|

The PBus command for this opcode doesn't admit presence of DATA field1. This frame cannot be validate. We must consider it as a corrupted frame and no replies will be generated.

### 3.5.7. Example: another malformed frame

Request:

| STX | 62378A34 | W | 00001A00 | 00000010 | 010203 | CRC16 | ETX |
|-----|----------|---|----------|----------|--------|-------|-----|

The request involves Area 2 that support write operation, but DATA field is shorter than expected2. Only 3 bytes are present instead of 16 bytes declared in SIZE32 field. We must consider it as a corrupted frame and no replies will be generated.

### 3.5.8. Example: CRC16 error

Request:

| STX | 78932A34 | E | 00002400 | 00000140 | xxxx | ETX |
|-----|----------|---|----------|----------|------|-----|

Crc computed on this frame doesn't match the value in CRC16 field. We must consider it as a corrupted frame and no replies will be generated.

---

1. Parser cannot make any assumption on the presence of DATA field during parsing since there is no special character to bound a PBus command. It must assume that no DATA is present so first byte of DATA field will be treat as OPCODE of a subsequent PBus command. Length control will invalidate this frame.
2. Parser must assume that SIZE32 bytes are present in DATA field. Length control will invalidate this frame.

---

## 3.6. Protocol frame example with multicommand

The forthcoming examples shows some frame with multicommand with more emphasis on erroneous cases. Consider the preceding address space mapping.

### 3.6.1. Example: correct multicommand

Request

| STX | DF3452B2 | PBus command 1 | | PBus command 2 | | PBus command 3 | | CRC16 | ETX |
|-----|----------|--------|----------|---|----------|----------|---|-------|-----|
| | | R | 00001020 | 00000002 | W | 00002000 | 00000002 | 37A2 | E | 00002400 | 00000100 |

This request involves all defined areas. All command are correct and the reply will be:

| STX | 4D5A4F | 0001 | DF3452B2 | PBus cmd reply 1 | | PBus cmd reply 2 | | PBus cmd reply 3 | | CRC16 | ETX |
|-----|--------|------|----------|---|----------|----------|---|----------|----------|---|-------|
| | | | | R | 00001020 | 00000002 | 4455 | W | 00002000 | 00000002 | E | 00002400 | 00000100 |

The commands are executed sequentially from left to right (from command 1 to command n). Note that is possible to request more operation on the same area (same addresses) in a single multicommand.

### 3.6.2. Example: multicommand with error

Request

| STX | 7643D4F4 | PBus command 1 | | PBus command 2 | | PBus command 3 | | CRC16 | ETX |
|-----|----------|---|----------|---|----------|---|----------|-------|-----|
| | | C | 00001100 | 00000100 | C | 00002000 | 00000010 | E | 00002400 | 00000100 |

Reply

| STX | 4D5A4F | 0001 | 7643D4F4 | PBus cmd reply 1 | | PBus cmd reply 2 | | PBus cmd reply 3 | | CRC16 | ETX |
|-----|--------|------|----------|---|----------|----------|---|----------|----------|---|-------|
| | | | | C | 00001100 | 00000100 | CD4F | C | 00002000 | 00000010 | E | 00002400 | 00000100 |

PBus command 2 request to perform a crc operation on Area 2 that do not support crc. Only PBus command reply 2 will be a NAK.

In general only failed command1 will populate the reply with NAK, no matter of the position in multicommand or outcome of other commands (if any) in multicommand.

### 3.6.3. Example: another multicommand with error

Request:

| STX | 9483A3AA | PBus command 1 | | PBus command 2 | | PBus command 3 | | CRC16 | ETX |
|-----|----------|---|----------|---|----------|---|----------|-------|-----|
| | | R | 00002008 | 00000010 | E | 00002300 | 00000008 | W | 00003400 | 00000006 | A3DE341556FF |

Reply

| STX | 4D5A4F | 0001 | 9483A3AA | PBus cmd reply 1 | | PBus cmd reply 2 | | PBus cmd reply 3 | | CRC16 | ETX |
|-----|--------|------|----------|---|----------|---|----------|----------|---|-------|
| | | | | R | 00002008 | 00000000 | E | 00002300 | 00000008 | W | 00003400 | 00000000 |

PBus command 1 fails due to a read operation that exceed area 2 limits. Pbus command 3 wants to write to unallocated addresses.

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## 3.6.4. Example: further multicommand with error

Request:

| STX | 345344AF | PBus command 1 | PBus command 2 | PBus command 3 | PBus command 4 | CRC16 | ETX |
|---|---|---|---|---|---|---|---|
| | R 0000101A | 00000010 E | 00002300 | 00000008 A | 00003400 | 00000006 A3DE C | 04002500 00000D00 |
| | | | | ↑ | ↑ | ↑ | |

This multicommand request cannot be parsed. PBus command 3 must be consider corrupted due to the reasons below:

3.  The failure is intended to be such as a NAK replies can be generated, instead of a corrupted frame request.

**- OPCODE** 'A' is unknown.

**- SIZE32** and size of DATA field doesn't match1

Anyone of the points above by itself may suffice to invalidate PBus command 3. Since it is not be feasible to parse PBus command 3, also any subsequent PBus commands cannot be parsed.

No reply is generated for this request.

## 3.6.5. Example: false positive

The case presented below is one that should be considered wrong, because the request is malformed or corrupted, but it cannot be possible to establish the wrongness of request. And an operation is performed by mistake.

Request:

| STX | AA2435E4 | PBus command 1 | | PBus command 2 | | CRC16 | ETX |
|---|---|---|---|---|---|---|---|
| | W | 00002300 | 0000000C | 142A36 C | 00001F00 | 00000100 | |
| | | | ↑ | ↑ | | 9 bytes | |

This request should be considered as corrupted, but due to the circumstance it will be considered as correct frame composed by a single PBus command.

Indeed in PBus command 1 is asked a write operation on Area 3, 10 bytes length but DATA field contains only 3 bytes. The subsequent PBus command 2 takes 9 bytes (1 byte for OPCODE, 4 for ADDR32, and 4 for SIZE32). Parse cannot help but consider PBus command 2 as part of DATA field of PBus command 1, no matter if PBus command 2 is formerly and syntactically correct or not. Only its length is important.

4.  In this case parser would consider DATA field of PBus command 3 to be 6 bytes, so it assumes that the first bytes of PBus command 4 to belong DATA field of PBus command 3. Syntax verification and length control will invalidate this frame.

In this case a write operation will be performed and the reply will be:

| STX | 4D5A4F | 0001 | AA2435E4 | W | 00002300 | 0000000C | CRC16 | ETX |
|---|---|---|---|---|---|---|---|---|

Since every PBus command issued should generate a PBus command reply, the Remote Control Program should establish an error condition, but a mistaken operation is already performed.

# Mezzo

This is the Mezzo Protocol

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| Info | 0x00000000 | 0x00000510 | This area contains general informations related to the device. |
| Network | 0x00001000 | 0x0000130c | This area contains network informations related to the device. It is divided in the following areas: |
| Source selection | 0x00002000 | 0x00002554 | This area contains informations related to the amplifiers sources. |
| Matrix | 0x00003000 | 0x00003068 | This area contains informations related to the Matrix. |
| User | 0x00004000 | 0x00004280 | This area contains informations related to the User block. |
| Speaker Layout | 0x00005000 | 0x000062f4 | This area contains informations related to the output routing. |
| Ways | 0x00007000 | 0x00007950 | This area contains informations related to the amplifiers ways. |
| Dante routing | 0x00008500 | 0x00008518 | This area contains informations related to Dante Routing. |
| GPI configuration | 0x00009000 | 0x00009004 | This area contains informations related to GPI. |
| GPO configuration | 0x00009e00 | 0x00009e0c | This area contains informations related to GPO. |
| Power config | 0x0000a000 | 0x0000a00c | This area contains informations related to Standby and Power Configuration. |
| Readings | 0x0000b000 | 0x0000bbd0 | This area contains informations related to amplifier readings like meters. |
| AutoSetup | 0x0000c000 | 0x0000ef04 | This area contains informations related to the autosetup. |
| Zone Block | 0x0000f000 | 0x0000f340 | This area contains informations related to the amplifiers zones. |
| Dante Settings | 0x00010000 | 0x000120b1 | This area contains UXT chip informations about status and settings. It includes as well available commands. |
| OEM Spare Area | 0x00013000 | 0x00013100 | Empty Spare Area dedicated to OEM. |
| Blink | 0x00100000 | 0x00100001 | The blink command |
| System Reboot | 0x00100001 | 0x00100002 | The system reboot command |
| Load Default Parameters | 0x00100002 | 0x00100003 | Equivalent to an hardware Hard Reset |
| Firmware Area | 0x00700000 | 0x00800000 | This area contains the firmware. The max size for firmware is 1048576 |
| Firmware Start | 0x00900000 | 0x00900006 | This area contains the new firmware information, use this to verify the firmware before flash it |
| Firmware Flash Erase | 0x00900010 | 0x00900011 | This will start the upgrade firmware |

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# Info

This area contains general informations related to the device. It is divided in the following two(2) areas:

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| Read only area data struct | 0x00000000 | 0x0000007a | Readonly informations |
| Read write client area | 0x000000f4 | 0x00000510 | Readonly informations |

# Read only area data struct

Readonly informations

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00000000 (0) | Model | char[20] | 20 | R | String NULL terminated representing the Model ID |
| 0x00000014 (20) | SerialNumber | char[16] | 16 | R | tring NULL terminated representing the serial number |
| 0x00000024 (36) | ManufacturerID | char[20] | 20 | R | String NULL terminated representing the manufacturer identifier |
| 0x00000038 (56) | ManufacturerModel | char[20] | 20 | R | String NULL terminated representing the manufacturer model identifier |
| 0x0000004c (76) | ManufacturerSerialNumber | char[20] | 20 | R | String NULL terminated representing the manufacturer serial number |
| 0x00000060 (96) | FWInfo | char[20] | 20 | R | String NULL terminated representing the firmware version |
| 0x00000074 (116) | MAC Address | uint8[6] | 6 | R | Actual (running) MAC address expressed in big endian. For example if MAC address is 00:1D:C1:AA:BB:CC, bytes are: |

| offset | bytes |
|---|---|
| 0x00 | 0x00 |
| 0x01 | 0x1D |
| 0x02 | 0xC1 |
| 0x03 | 0xAA |
| 0x04 | 0xBB |
| 0x05 | 0xCC |

# Read write client area

Readonly informations

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| NickName | 0x000000f4 | 0x00000144 | NickName |
| HiddenClientSpare | 0x0000050c | 0x00000510 | Spare area for client usage |

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# NickName

NickName

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x000000f4 (244) | NickName | char[20] | 80 | R\W | String NULL terminated representing the device Nick name (set from the client) |

# HiddenClientSpare

Spare area for client usage

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|

# Network

This area contains network informations related to the device. It is divided in the following areas:

| BlockId | Start Address | End Address | Description |
|---------|---------------|-------------|-------------|
| NetworkSettings | 0x00001000 | 0x0000100d | Network Settings |
| NetworkInformations | 0x00001300 | 0x0000130c | Read only area containing network informations |

# NetworkSettings

Network Settings

| BlockId | Start Address | End Address | Description |
|---------|---------------|-------------|-------------|
| Network configuration data struct | 0x00001000 | 0x0000100d | Network configurations |

# Network configuration data struct

Network configurations

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x00001000 (4096) | AddressMode | uint8 | 1 | R\W | If 1 set the equipment to use a static IP address. In the case Ip address and netmask are set by the appropriate fiend. If equal to 0, the equipment is set to dynamic address, using DHCP (or IAuto-IP) |
| 0x00001001 (4097) | IPAddress | uint8[4] | 4 | R\W | Is the IP address. This field is used only if address mode is 0 (static IP). Is expressed in big endian. <table><tr><th>offset</th><th>bytes</th></tr><tr><td>0x00</td><td>0xC0 (192)</td></tr><tr><td>0x01</td><td>0xA8 (168)</td></tr><tr><td>0x02</td><td>0x37 ( 55)</td></tr><tr><td>0x03</td><td>0x6C (108)</td></tr></table> |
| 0x00001005 (4101) | NetMask | uint8[4] | 4 | R\W | Is the NetMask address. This field is used only if address mode is 0 (static IP). Is expressed in big endian. <table><tr><th>offset</th><th>bytes</th></tr><tr><td>0x00</td><td>0xC0 (192)</td></tr><tr><td>0x01</td><td>0xA8 (168)</td></tr><tr><td>0x02</td><td>0x37 ( 55)</td></tr><tr><td>0x03</td><td>0x6C (108)</td></tr></table> |
| 0x00001009 (4105) | DefaultGW | uint8[4] | 4 | R\W | Is the default gateway address. This field is used only if address mode is 0 (static IP). Is expressed in big endian. |

# NetworkInformations

Read only area containing network informations

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x00001300 (4864) | IPAddress | uint8[4] | 4 | R | Is the IP address. Is expressed in big endian. |
| 0x00001304 (4868) | NetMask | uint8[4] | 4 | R | Is the NetMask address. Is expressed in big endian. |
| 0x00001308 (4872) | DefaultGW | uint8[4] | 4 | R | Is the default gateway address. Is expressed in big endian. |

# Source selection

This area contains informations related to the amplifiers sources.

| BlockId | Start Address | End Address | Description |
|---------|---------------|-------------|-------------|
| Amplifier input references | 0x00002000 | 0x00002010 | |
| ~~Old Sources~~ | ~~0x00002100~~ | ~~0x000021a8~~ | |
| Sources | 0x00002200 | 0x000022c4 | |
| Minijack Anti-Pop Configuration | 0x00002500 | 0x00002554 | This area contains the configurations related to Minijack Anti-Pop. |

# Amplifier input references

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00002000 (8192) | Analog Ref | Float | 4 | R\W | Analog source reference in linear |
| 0x00002004 (8196) | Analog Delay | Float | 4 | R\W | Analog delay in s |
| 0x00002008 (8200) | Digital Ref | Float | 4 | R\W | Digital source reference in linear |
| 0x0000200c (8204) | Digital Delay | Float | 4 | R\W | Digital delay in s |

# ~~Old Sources~~

Deprecated since version 1.1.1

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| Priority1 Type | 0x00002100 | 0x00002108 | |
| Priority1 Channel | 0x00002108 | 0x00002110 | |
| Priority2 Type | 0x00002110 | 0x00002118 | |
| Priority2 Channel | 0x00002118 | 0x00002120 | |
| BackupStrategyEnable | 0x00002120 | 0x00002124 | |
| PilotToneEnable | 0x00002124 | 0x00002128 | |
| Backup threshold mode | 0x00002128 | 0x00002138 | |
| User digital threshold | 0x00002138 | 0x00002148 | |
| User analog threshold | 0x00002148 | 0x00002158 | |
| Pilot tone freq | 0x00002158 | 0x00002168 | |
| Pilot tone high threshold | 0x00002168 | 0x00002178 | |
| Pilot tone low threshold | 0x00002178 | 0x00002188 | |
| External trigger | 0x00002188 | 0x00002198 | |
| External input | 0x00002198 | 0x000021a8 | |

# ~~Priority1 Type~~

Deprecated since version 1.1.0

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00002100 (8448) | Priority1 Type CH 1 | Uint16 | 2 | R\W | Enum representing the first priority for the selected source. For the allowed values for this field refer to … (TODO) |
| 0x00002102 (8450) | Priority1 Type CH 2 | Uint16 | 2 | R\W | Enum representing the first priority for the selected source. For the allowed values for this field refer to … (TODO) |
| 0x00002104 (8452) | Priority1 Type CH 3 | Uint16 | 2 | R\W | Enum representing the first priority for the selected source. For the allowed values for this field refer to … (TODO) |
| 0x00002106 (8454) | Priority1 Type CH 4 | Uint16 | 2 | R\W | Enum representing the first priority for the selected source. For the allowed values for this field refer to … (TODO) |

## Priority1 Channel

Deprecated since version 1.1.0

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00002108 (8456) | Priority1 Channel CH 1 | Uint16 | 2 | R\W | Enum representing the first priority for the selected source. For the allowed values for this field refer to …(TODO) |
| 0x0000210a (8458) | Priority1 Channel CH 2 | Uint16 | 2 | R\W | Enum representing the first priority for the selected source. For the allowed values for this field refer to …(TODO) |
| 0x0000210c (8460) | Priority1 Channel CH 3 | Uint16 | 2 | R\W | Enum representing the first priority for the selected source. For the allowed values for this field refer to …(TODO) |
| 0x0000210e (8462) | Priority1 Channel CH 4 | Uint16 | 2 | R\W | Enum representing the first priority for the selected source. For the allowed values for this field refer to …(TODO) |

## Priority2 Type

Deprecated since version 1.1.0

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00002110 (8464) | Priority2 Type CH 1 | Uint16 | 2 | R\W | Enum representing the first priority for the selected source. For the allowed values for this field refer to … (TODO) |
| 0x00002112 (8466) | Priority2 Type CH 2 | Uint16 | 2 | R\W | Enum representing the first priority for the selected source. For the allowed values for this field refer to … (TODO) |
| 0x00002114 (8468) | Priority2 Type CH 3 | Uint16 | 2 | R\W | Enum representing the first priority for the selected source. For the allowed values for this field refer to … (TODO) |
| 0x00002116 (8470) | Priority2 Type CH 4 | Uint16 | 2 | R\W | Enum representing the first priority for the selected source. For the allowed values for this field refer to … (TODO) |

## Priority2 Channel

Deprecated since version 1.1.0

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00002118 (8472) | Priority2 Channel CH 1 | Uint16 | 2 | R\W | Enum representing the first priority for the selected source. For the allowed values for this field refer to …(TODO) |
| 0x0000211a (8474) | Priority2 Channel CH 2 | Uint16 | 2 | R\W | Enum representing the first priority for the selected source. For the allowed values for this field refer to …(TODO) |
| 0x0000211c (8476) | Priority2 Channel CH 3 | Uint16 | 2 | R\W | Enum representing the first priority for the selected source. For the allowed values for this field refer to …(TODO) |
| 0x0000211e (8478) | Priority2 Channel CH 4 | Uint16 | 2 | R\W | Enum representing the first priority for the selected source. For the allowed values for this field refer to …(TODO) |

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## BackupStrategyEnable

Deprecated since version 1.1.0

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x00002120 (8480) | BackupStrategyEnable CH 1 | uint8 | 1 | R\W | if set to 0 backup strategy is disabled, if set to 1 is enabled |
| 0x00002121 (8481) | BackupStrategyEnable CH 2 | uint8 | 1 | R\W | if set to 0 backup strategy is disabled, if set to 1 is enabled |
| 0x00002122 (8482) | BackupStrategyEnable CH 3 | uint8 | 1 | R\W | if set to 0 backup strategy is disabled, if set to 1 is enabled |
| 0x00002123 (8483) | BackupStrategyEnable CH 4 | uint8 | 1 | R\W | if set to 0 backup strategy is disabled, if set to 1 is enabled |

## PilotToneEnable

Deprecated since version 1.1.0

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x00002124 (8484) | PilotToneEnable CH 1 | uint8 | 1 | R\W | if set to 0 pilot tone is disabled, if set to 1 is enabled |
| 0x00002125 (8485) | PilotToneEnable CH 2 | uint8 | 1 | R\W | if set to 0 pilot tone is disabled, if set to 1 is enabled |
| 0x00002126 (8486) | PilotToneEnable CH 3 | uint8 | 1 | R\W | if set to 0 pilot tone is disabled, if set to 1 is enabled |
| 0x00002127 (8487) | PilotToneEnable CH 4 | uint8 | 1 | R\W | if set to 0 pilot tone is disabled, if set to 1 is enabled |

## Backup threshold mode

Deprecated since version 1.1.0

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x00002128 (8488) | Backup threshold mode CH 1 | Uint32 | 4 | R\W | Enum representing the backup threshold mode to be used. For the allowed values for this field refer to …(TODO) |
| 0x0000212c (8492) | Backup threshold mode CH 2 | Uint32 | 4 | R\W | Enum representing the backup threshold mode to be used. For the allowed values for this field refer to …(TODO) |
| 0x00002130 (8496) | Backup threshold mode CH 3 | Uint32 | 4 | R\W | Enum representing the backup threshold mode to be used. For the allowed values for this field refer to …(TODO) |
| 0x00002134 (8500) | Backup threshold mode CH 4 | Uint32 | 4 | R\W | Enum representing the backup threshold mode to be used. For the allowed values for this field refer to …(TODO) |

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# User digital threshold

Deprecated since version 1.1.0

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00002138 (8504) | User digital threshold CH 1 | Float | 4 | R\W | User defined threshold for digital signal in linear |
| 0x0000213c (8508) | User digital threshold CH 2 | Float | 4 | R\W | User defined threshold for digital signal in linear |
| 0x00002140 (8512) | User digital threshold CH 3 | Float | 4 | R\W | User defined threshold for digital signal in linear |
| 0x00002144 (8516) | User digital threshold CH 4 | Float | 4 | R\W | User defined threshold for digital signal in linear |

# User analog threshold

Deprecated since version 1.1.0

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00002148 (8520) | User analog threshold CH 1 | Float | 4 | R\W | User defined threshold for analog signal in linear |
| 0x0000214c (8524) | User analog threshold CH 2 | Float | 4 | R\W | User defined threshold for analog signal in linear |
| 0x00002150 (8528) | User analog threshold CH 3 | Float | 4 | R\W | User defined threshold for analog signal in linear |
| 0x00002154 (8532) | User analog threshold CH 4 | Float | 4 | R\W | User defined threshold for analog signal in linear |

# Pilot tone freq

Deprecated since version 1.1.0

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00002158 (8536) | Pilot tone freq CH 1 | Float | 4 | R\W | Pilot tone frequency in Hz |
| 0x0000215c (8540) | Pilot tone freq CH 2 | Float | 4 | R\W | Pilot tone frequency in Hz |
| 0x00002160 (8544) | Pilot tone freq CH 3 | Float | 4 | R\W | Pilot tone frequency in Hz |
| 0x00002164 (8548) | Pilot tone freq CH 4 | Float | 4 | R\W | Pilot tone frequency in Hz |

# Pilot tone high threshold

Deprecated since version 1.1.0

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00002168 (8552) | Pilot tone high threshold CH 1 | Float | 4 | R\W | Pilot tone high threshold in Hz |
| 0x0000216c (8556) | Pilot tone high threshold CH 2 | Float | 4 | R\W | Pilot tone high threshold in Hz |
| 0x00002170 (8560) | Pilot tone high threshold CH 3 | Float | 4 | R\W | Pilot tone high threshold in Hz |
| 0x00002174 (8564) | Pilot tone high threshold CH 4 | Float | 4 | R\W | Pilot tone high threshold in Hz |

# Pilot tone low threshold

Deprecated since version 1.1.0

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00002178 (8568) | Pilot tone low threshold CH 1 | Float | 4 | R\W | Pilot tone low threshold |
| 0x0000217c (8572) | Pilot tone low threshold CH 2 | Float | 4 | R\W | Pilot tone low threshold |
| 0x00002180 (8576) | Pilot tone low threshold CH 3 | Float | 4 | R\W | Pilot tone low threshold |
| 0x00002184 (8580) | Pilot tone low threshold CH 4 | Float | 4 | R\W | Pilot tone low threshold |

# External trigger

Deprecated since version 1.1.0

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00002188 (8584) | External trigger CH 1 | Uint32 | 4 | R\W | Enum representing the External trigger to activate |
| 0x0000218c (8588) | External trigger CH 2 | Uint32 | 4 | R\W | Enum representing the External trigger to activate |
| 0x00002190 (8592) | External trigger CH 3 | Uint32 | 4 | R\W | Enum representing the External trigger to activate |
| 0x00002194 (8596) | External trigger CH 4 | Uint32 | 4 | R\W | Enum representing the External trigger to activate |

# External input

Deprecated since version 1.1.0

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00002198 (8600) | External input CH 1 | Uint32 | 4 | R\W | Enum representing the GPI input to be used to select the source. For the GPI Input configuration see TODO |
| 0x0000219c (8604) | External input CH 2 | Uint32 | 4 | R\W | Enum representing the GPI input to be used to select the source. For the GPI Input configuration see TODO |
| 0x000021a0 (8608) | External input CH 3 | Uint32 | 4 | R\W | Enum representing the GPI input to be used to select the source. For the GPI Input configuration see TODO |
| 0x000021a4 (8612) | External input CH 4 | Uint32 | 4 | R\W | Enum representing the GPI input to be used to select the source. For the GPI Input configuration see TODO |

# Sources

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| Source Id CH 1 | 0x00002200 | 0x00002204 | Enum representing the source absolute ids for the channel 1. Allowd values [-1 -> 31] |
| Source Id CH 2 | 0x00002204 | 0x00002208 | Enum representing the source absolute ids for the channel 2. Allowd values [-1 -> 31] |
| Source Id CH 3 | 0x00002208 | 0x0000220c | Enum representing the source absolute ids for the channel 3. Allowd values [-1 -> 31] |
| Source Id CH 4 | 0x0000220c | 0x00002210 | Enum representing the source absolute ids for the channel 4. Allowd values [-1 -> 31] |
| Priority Source index CH 1 | 0x00002210 | 0x00002214 | Enum representing the source index for the priority of channel 1 . Allowed values [0 -> 3] |
| Priority Source index CH 2 | 0x00002214 | 0x00002218 | Enum representing the source index for the priority of channel 2 . Allowed values [0 -> 3] |
| Priority Source index CH 3 | 0x00002218 | 0x0000221c | Enum representing the source index for the priority of channel 3 . Allowed values [0 -> 3] |
| Priority Source index CH 4 | 0x0000221c | 0x00002220 | Enum representing the source index for the priority of channel 4 . Allowed values [0 -> 3] |
| Default priority index | 0x00002220 | 0x00002224 | Enum representing the default priority index of the selected channel. Allowed values [0 -> 3] |
| Manual physical source selection | 0x00002224 | 0x00002228 | if set to 0 manual source selection is disabled, if set to -1 channel is muted, otherwise value is |
| BackupStrategyEnable | 0x00002228 | 0x0000222c | if set to 0 backup strategy is disabled, if set to 1 is enabled |
| Backup threshold mode | 0x0000222c | 0x00002230 | Enum representing the backup threshold mode to be used. If 0 it is the regular backup strategy. If 1 is backup strategy with backup threshold. |
| Backup threshold | 0x00002230 | 0x00002270 | Thresholds for signal |
| PilotToneEnable | 0x00002270 | 0x00002274 | if set to 0 pilot tone is disabled, if set to 1 is enabled |
| Pilot tone freq | 0x00002274 | 0x00002284 | Pilot tone frequency in Hz |
| Pilot tone high threshold | 0x00002284 | 0x00002294 | Pilot tone high threshold in Hz |
| Pilot tone low threshold | 0x00002294 | 0x000022a4 | Pilot tone low threshold |
| Pilot tone GPO enable | 0x000022a4 | 0x000022b4 | Enable the ability to trigger the GPO in absence of pilot tone |

# Source Id CH 1

Enum representing the source absolute ids for the channel 1. Allowd values [-1 -> 31]

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00002200 (8704) | Source 1 Id CH 1 | Int8 | 1 | R\W | Enum representing the source absolute id for the source 1 of channel 1. Allowd values [-1 -> 31] |
| 0x00002201 (8705) | Source 2 Id CH 1 | Int8 | 1 | R\W | Enum representing the source absolute id for the source 2 of channel 1. Allowd values [-1 -> 31] |
| 0x00002202 (8706) | Source 3 Id CH 1 | Int8 | 1 | R\W | Enum representing the source absolute id for the source 3 of channel 1. Allowd values [-1 -> 31] |
| 0x00002203 (8707) | Source 4 Id CH 1 | Int8 | 1 | R\W | Enum representing the source absolute id for the source 4 of channel 1. Allowd values [-1 -> 31] |

# Source Id CH 2

Enum representing the source absolute ids for the channel 2. Allowd values [-1 -> 31]

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00002204 (8708) | Source 1 Id CH 2 | Int8 | 1 | R\W | Enum representing the source absolute id for the source 1 of channel 2. Allowd values [-1 -> 31] |
| 0x00002205 (8709) | Source 2 Id CH 2 | Int8 | 1 | R\W | Enum representing the source absolute id for the source 2 of channel 2. Allowd values [-1 -> 31] |
| 0x00002206 (8710) | Source 3 Id CH 2 | Int8 | 1 | R\W | Enum representing the source absolute id for the source 3 of channel 2. Allowd values [-1 -> 31] |
| 0x00002207 (8711) | Source 4 Id CH 2 | Int8 | 1 | R\W | Enum representing the source absolute id for the source 4 of channel 2. Allowd values [-1 -> 31] |

# Source Id CH 3

Enum representing the source absolute ids for the channel 3. Allowd values [-1 -> 31]

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00002208 (8712) | Source 1 Id CH 3 | Int8 | 1 | R\W | Enum representing the source absolute id for the source 1 of channel 3. Allowd values [-1 -> 31] |
| 0x00002209 (8713) | Source 2 Id CH 3 | Int8 | 1 | R\W | Enum representing the source absolute id for the source 2 of channel 3. Allowd values [-1 -> 31] |
| 0x0000220a (8714) | Source 3 Id CH 3 | Int8 | 1 | R\W | Enum representing the source absolute id for the source 3 of channel 3. Allowd values [-1 -> 31] |
| 0x0000220b (8715) | Source 4 Id CH 3 | Int8 | 1 | R\W | Enum representing the source absolute id for the source 4 of channel 3. Allowd values [-1 -> 31] |

# Source Id CH 4

Enum representing the source absolute ids for the channel 4. Allowd values [-1 -> 31]

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000220c (8716) | Source 1 Id CH 4 | Int8 | 1 | R\W | Enum representing the source absolute id for the source 1 of channel 4. Allowd values [-1 -> 31] |
| 0x0000220d (8717) | Source 2 Id CH 4 | Int8 | 1 | R\W | Enum representing the source absolute id for the source 2 of channel 4. Allowd values [-1 -> 31] |
| 0x0000220e (8718) | Source 3 Id CH 4 | Int8 | 1 | R\W | Enum representing the source absolute id for the source 3 of channel 4. Allowd values [-1 -> 31] |
| 0x0000220f (8719) | Source 4 Id CH 4 | Int8 | 1 | R\W | Enum representing the source absolute id for the source 4 of channel 4. Allowd values [-1 -> 31] |

# Priority Source index CH 1

Enum representing the source index for the priority of channel 1 . Allowed values [0 -> 3]

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00002210 (8720) | Priority 1 source index CH 1 | Uint8 | 1 | R\W | Enum representing the source index for the priority 1 of channel 1. Allowed values [0 -> 3] |
| 0x00002211 (8721) | Priority 2 source index CH 1 | Uint8 | 1 | R\W | Enum representing the source index for the priority 2 of channel 1. Allowed values [0 -> 3] |
| 0x00002212 (8722) | Priority 3 source index CH 1 | Uint8 | 1 | R\W | Enum representing the source index for the priority 3 of channel 1. Allowed values [0 -> 3] |
| 0x00002213 (8723) | Priority 4 source index CH 1 | Uint8 | 1 | R\W | Enum representing the source index for the priority 4 of channel 1. Allowed values [0 -> 3] |

# Priority Source index CH 2

Enum representing the source index for the priority of channel 2 . Allowed values [0 -> 3]

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00002214 (8724) | Priority 1 source index CH 2 | Uint8 | 1 | R\W | Enum representing the source index for the priority 1 of channel 2. Allowed values [0 -> 3] |
| 0x00002215 (8725) | Priority 2 source index CH 2 | Uint8 | 1 | R\W | Enum representing the source index for the priority 2 of channel 2. Allowed values [0 -> 3] |
| 0x00002216 (8726) | Priority 3 source index CH 2 | Uint8 | 1 | R\W | Enum representing the source index for the priority 3 of channel 2. Allowed values [0 -> 3] |
| 0x00002217 (8727) | Priority 4 source index CH 2 | Uint8 | 1 | R\W | Enum representing the source index for the priority 4 of channel 2. Allowed values [0 -> 3] |

# Priority Source index CH 3

Enum representing the source index for the priority of channel 3 . Allowed values [0 -> 3]

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00002218 (8728) | Priority 1 source index CH 3 | Uint8 | 1 | R\W | Enum representing the source index for the priority 1 of channel 3. Allowed values [0 -> 3] |
| 0x00002219 (8729) | Priority 2 source index CH 3 | Uint8 | 1 | R\W | Enum representing the source index for the priority 2 of channel 3. Allowed values [0 -> 3] |
| 0x0000221a (8730) | Priority 3 source index CH 3 | Uint8 | 1 | R\W | Enum representing the source index for the priority 3 of channel 3. Allowed values [0 -> 3] |
| 0x0000221b (8731) | Priority 4 source index CH 3 | Uint8 | 1 | R\W | Enum representing the source index for the priority 4 of channel 3. Allowed values [0 -> 3] |

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# Priority Source index CH 4

Enum representing the source index for the priority of channel 4 . Allowed values [0 -> 3]

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000221c (8732) | Priority 1 source index CH 4 | Uint8 | 1 | R\W | Enum representing the source index for the priority 1 of channel 4. Allowed values [0 -> 3] |
| 0x0000221d (8733) | Priority 2 source index CH 4 | Uint8 | 1 | R\W | Enum representing the source index for the priority 2 of channel 4. Allowed values [0 -> 3] |
| 0x0000221e (8734) | Priority 3 source index CH 4 | Uint8 | 1 | R\W | Enum representing the source index for the priority 3 of channel 4. Allowed values [0 -> 3] |
| 0x0000221f (8735) | Priority 4 source index CH 4 | Uint8 | 1 | R\W | Enum representing the source index for the priority 4 of channel 4. Allowed values [0 -> 3] |

# Default priority index

Enum representing the default priority index of the selected channel. Allowed values [0 -> 3]

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00002220 (8736) | Default priority index CH 1 | Uint8 | 1 | R\W | Enum representing the default priority index of channel 1. Allowed values [0 -> 3] |
| 0x00002221 (8737) | Default priority index CH 2 | Uint8 | 1 | R\W | Enum representing the default priority index of channel 2. Allowed values [0 -> 3] |
| 0x00002222 (8738) | Default priority index CH 3 | Uint8 | 1 | R\W | Enum representing the default priority index of channel 3. Allowed values [0 -> 3] |
| 0x00002223 (8739) | Default priority index CH 4 | Uint8 | 1 | R\W | Enum representing the default priority index of channel 4. Allowed values [0 -> 3] |

# Manual physical source selection

if set to 0 manual source selection is disabled, if set to -1 channel is muted, otherwise value is

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00002224 (8740) | ManualSourceSelection CH 1 | int8 | 1 | R\W | if set to 0 manual source selection is disabled, if set to -1 channel is muted, otherwise value is |
| 0x00002225 (8741) | ManualSourceSelection CH 2 | int8 | 1 | R\W | if set to 0 manual source selection is disabled, if set to -1 channel is muted, otherwise value is |
| 0x00002226 (8742) | ManualSourceSelection CH 3 | int8 | 1 | R\W | if set to 0 manual source selection is disabled, if set to -1 channel is muted, otherwise value is |
| 0x00002227 (8743) | ManualSourceSelection CH 4 | int8 | 1 | R\W | if set to 0 manual source selection is disabled, if set to -1 channel is muted, otherwise value is |

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# BackupStrategyEnable

if set to 0 backup strategy is disabled, if set to 1 is enabled

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x00002228 (8744) | BackupStrategyEnable CH 1 | uint8 | 1 | R\W | if set to 0 backup strategy is disabled, if set to 1 is enabled |
| 0x00002229 (8745) | BackupStrategyEnable CH 2 | uint8 | 1 | R\W | if set to 0 backup strategy is disabled, if set to 1 is enabled |
| 0x0000222a (8746) | BackupStrategyEnable CH 3 | uint8 | 1 | R\W | if set to 0 backup strategy is disabled, if set to 1 is enabled |
| 0x0000222b (8747) | BackupStrategyEnable CH 4 | uint8 | 1 | R\W | if set to 0 backup strategy is disabled, if set to 1 is enabled |

# Backup threshold mode

Enum representing the backup threshold mode to be used. If 0 it is the regular backup strategy. If 1 is backup strategy with backup threshold.

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000222c (8748) | Backup threshold mode CH 1 | Uint8 | 1 | R\W | Enum representing the backup threshold mode to be used. If 0 it is the regular backup strategy. If 1 is backup strategy with backup threshold. |
| 0x0000222d (8749) | Backup threshold mode CH 2 | Uint8 | 1 | R\W | Enum representing the backup threshold mode to be used. If 0 it is the regular backup strategy. If 1 is backup strategy with backup threshold. |
| 0x0000222e (8750) | Backup threshold mode CH 3 | Uint8 | 1 | R\W | Enum representing the backup threshold mode to be used. If 0 it is the regular backup strategy. If 1 is backup strategy with backup threshold. |
| 0x0000222f (8751) | Backup threshold mode CH 4 | Uint8 | 1 | R\W | Enum representing the backup threshold mode to be used. If 0 it is the regular backup strategy. If 1 is backup strategy with backup threshold. |

# Backup threshold

Thresholds for signal

| BlockId | Start Address | End Address | Description |
|---------|---------------|-------------|-------------|
| Thresholds CH 1 | 0x00002230 | 0x00002240 | Thresholds for signal |
| Thresholds CH 2 | 0x00002240 | 0x00002250 | Thresholds for signal |
| Thresholds CH 3 | 0x00002250 | 0x00002260 | Thresholds for signal |
| Thresholds CH 4 | 0x00002260 | 0x00002270 | Thresholds for signal |

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# Thresholds CH 1

Thresholds for signal

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x00002230 (8752) | Threshold CH 1 source selection 1 | Float | 4 | R\W | Threshold for signal |
| 0x00002234 (8756) | Threshold CH 1 source selection 2 | Float | 4 | R\W | Threshold for signal |
| 0x00002238 (8760) | Threshold CH 1 source selection 3 | Float | 4 | R\W | Threshold for signal |
| 0x0000223c (8764) | Threshold CH 1 source selection 4 | Float | 4 | R\W | Threshold for signal |

# Thresholds CH 2

Thresholds for signal

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x00002240 (8768) | Threshold CH 2 source selection 1 | Float | 4 | R\W | Threshold for signal |
| 0x00002244 (8772) | Threshold CH 2 source selection 2 | Float | 4 | R\W | Threshold for signal |
| 0x00002248 (8776) | Threshold CH 2 source selection 3 | Float | 4 | R\W | Threshold for signal |
| 0x0000224c (8780) | Threshold CH 2 source selection 4 | Float | 4 | R\W | Threshold for signal |

# Thresholds CH 3

Thresholds for signal

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x00002250 (8784) | Threshold CH 3 source selection 1 | Float | 4 | R\W | Threshold for signal |
| 0x00002254 (8788) | Threshold CH 3 source selection 2 | Float | 4 | R\W | Threshold for signal |
| 0x00002258 (8792) | Threshold CH 3 source selection 3 | Float | 4 | R\W | Threshold for signal |
| 0x0000225c (8796) | Threshold CH 3 source selection 4 | Float | 4 | R\W | Threshold for signal |

# Thresholds CH 4

Thresholds for signal

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00002260 (8800) | Threshold CH 4 source selection 1 | Float | 4 | R\W | Threshold for signal |
| 0x00002264 (8804) | Threshold CH 4 source selection 2 | Float | 4 | R\W | Threshold for signal |
| 0x00002268 (8808) | Threshold CH 4 source selection 3 | Float | 4 | R\W | Threshold for signal |
| 0x0000226c (8812) | Threshold CH 4 source selection 4 | Float | 4 | R\W | Threshold for signal |

# PilotToneEnable

if set to 0 pilot tone is disabled, if set to 1 is enabled

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00002270 (8816) | PilotToneEnable CH 1 | uint8 | 1 | R\W | if set to 0 pilot tone is disabled, if set to 1 is enabled |
| 0x00002271 (8817) | PilotToneEnable CH 2 | uint8 | 1 | R\W | if set to 0 pilot tone is disabled, if set to 1 is enabled |
| 0x00002272 (8818) | PilotToneEnable CH 3 | uint8 | 1 | R\W | if set to 0 pilot tone is disabled, if set to 1 is enabled |
| 0x00002273 (8819) | PilotToneEnable CH 4 | uint8 | 1 | R\W | if set to 0 pilot tone is disabled, if set to 1 is enabled |

# Pilot tone freq

Pilot tone frequency in Hz

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00002274 (8820) | Pilot tone freq CH 1 | Float | 4 | R\W | Pilot tone frequency in Hz |
| 0x00002278 (8824) | Pilot tone freq CH 2 | Float | 4 | R\W | Pilot tone frequency in Hz |
| 0x0000227c (8828) | Pilot tone freq CH 3 | Float | 4 | R\W | Pilot tone frequency in Hz |
| 0x00002280 (8832) | Pilot tone freq CH 4 | Float | 4 | R\W | Pilot tone frequency in Hz |

# Pilot tone high threshold

Pilot tone high threshold in Hz

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00002284 (8836) | Pilot tone high threshold CH 1 | Float | 4 | R\W | Pilot tone high threshold in Vrms |
| 0x00002288 (8840) | Pilot tone high threshold CH 2 | Float | 4 | R\W | Pilot tone high threshold in Vrms |
| 0x0000228c (8844) | Pilot tone high threshold CH 3 | Float | 4 | R\W | Pilot tone high threshold in Vrms |
| 0x00002290 (8848) | Pilot tone high threshold CH 4 | Float | 4 | R\W | Pilot tone high threshold in Vrms |

# Pilot tone low threshold

Pilot tone low threshold

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00002294 (8852) | Pilot tone low threshold CH 1 | Float | 4 | R\W | Pilot tone low threshold in Vrms |
| 0x00002298 (8856) | Pilot tone low threshold CH 2 | Float | 4 | R\W | Pilot tone low threshold in Vrms |
| 0x0000229c (8860) | Pilot tone low threshold CH 3 | Float | 4 | R\W | Pilot tone low threshold in Vrms |
| 0x000022a0 (8864) | Pilot tone low threshold CH 4 | Float | 4 | R\W | Pilot tone low threshold in Vrms |

# Pilot tone GPO enable

Enable the ability to trigger the GPO in absence of pilot tone

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x000022a4 (8868) | Pilot tone GPO enable CH 1 | Uint32 | 4 | R\W | If none of the sources on channel 1 has a valid input pilot tone, by setting this field at 1 GPO is triggered. |
| 0x000022a8 (8872) | Pilot tone GPO enable CH 2 | Uint32 | 4 | R\W | If none of the sources on channel 2 has a valid input pilot tone, by setting this field at 1 GPO is triggered. |
| 0x000022ac (8876) | Pilot tone GPO enable CH 3 | Uint32 | 4 | R\W | If none of the sources on channel 3 has a valid input pilot tone, by setting this field at 1 GPO is triggered. |
| 0x000022b0 (8880) | Pilot tone GPO enable CH 4 | Uint32 | 4 | R\W | If none of the sources on channel 4 has a valid input pilot tone, by setting this field at 1 GPO is triggered. |

# Minijack Anti-Pop Configuration

This area contains the configurations related to Minijack Anti-Pop.

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| Enable | 0x00002500 | 0x00002504 | Parameter to enable or disable Minijack Anti-Pop. |

# Enable

Parameter to enable or disable Minijack Anti-Pop.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00002500 (9472) | Enable CH 1 | Uint8 | 1 | R\W | Set to 1 to enable Minijack Anti-Pop, set to 0 to disable it. |
| 0x00002501 (9473) | Enable CH 2 | Uint8 | 1 | R\W | Set to 1 to enable Minijack Anti-Pop, set to 0 to disable it. |

# Matrix

This area contains informations related to the Matrix.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00003000 (12288) | Type | uint32 | 4 | R\W | Represent the matrix type currently in use |
| 0x00003004 (12292) | Source 1 pre Mute | uint8 | 1 | R\W | Pre mute to be applied to source 1 |
| 0x00003005 (12293) | Source 2 pre Mute | uint8 | 1 | R\W | Pre mute to be applied to source 2 |
| 0x00003006 (12294) | Source 3 pre Mute | uint8 | 1 | R\W | Pre mute to be applied to source 3 |
| 0x00003007 (12295) | Source 4 pre Mute | uint8 | 1 | R\W | Pre mute to be applied to source 4 |
| 0x00003008 (12296) | Source 1 pre Gain | Float | 4 | R\W | Pre Gain to be applied to source 1 |
| 0x0000300c (12300) | Source 2 pre Gain | Float | 4 | R\W | Pre Gain to be applied to source 2 |
| 0x00003010 (12304) | Source 3 pre Gain | Float | 4 | R\W | Pre Gain to be applied to source 3 |
| 0x00003014 (12308) | Source 4 pre Gain | Float | 4 | R\W | Pre Gain to be applied to source 4 |
| 0x00003018 (12312) | Source 1 Gain 1 | Float | 4 | R\W | Linear Gain related to output 1 for the Source 1 |
| 0x0000301c (12316) | Source 1 Gain 2 | Float | 4 | R\W | Linear Gain related to output 2 for the Source 1 |
| 0x00003020 (12320) | Source 1 Gain 3 | Float | 4 | R\W | Linear Gain related to output 3 for the Source 1 |
| 0x00003024 (12324) | Source 1 Gain 4 | Float | 4 | R\W | Linear Gain related to output 4 for the Source 1 |
| 0x00003028 (12328) | Source 2 Gain 1 | Float | 4 | R\W | Linear Gain related to output 1 for the Source 2 |
| 0x0000302c (12332) | Source 2 Gain 2 | Float | 4 | R\W | Linear Gain related to output 2 for the Source 2 |
| 0x00003030 (12336) | Source 2 Gain 3 | Float | 4 | R\W | Linear Gain related to output 3 for the Source 2 |
| 0x00003034 (12340) | Source 2 Gain 4 | Float | 4 | R\W | Linear Gain related to output 4 for the Source 2 |
| 0x00003038 (12344) | Source 3 Gain 1 | Float | 4 | R\W | Linear Gain related to output 1 for the Source 3 |
| 0x0000303c (12348) | Source 3 Gain 2 | Float | 4 | R\W | Linear Gain related to output 2 for the Source 3 |
| 0x00003040 (12352) | Source 3 Gain 3 | Float | 4 | R\W | Linear Gain related to output 3 for the Source 3 |
| 0x00003044 (12356) | Source 3 Gain 4 | Float | 4 | R\W | Linear Gain related to output 4 for the Source 3 |
| 0x00003048 (12360) | Source 4 Gain 1 | Float | 4 | R\W | Linear Gain related to output 1 for the Source 4 |
| 0x0000304c (12364) | Source 4 Gain 2 | Float | 4 | R\W | Linear Gain related to output 2 for the Source 4 |
| 0x00003050 (12368) | Source 4 Gain 3 | Float | 4 | R\W | Linear Gain related to output 3 for the Source 4 |

| Address | Name | Type | Size | Access | Description |
|---|---|---|---|---|---|
| 0x00003054 (12372) | Source 4 Gain 4 | Float | 4 | R\W | Linear Gain related to output 4 for the Source 4 |
| 0x00003058 (12376) | Source 1 Mute 1 | uint8 | 1 | R\W | Mute to be applied to source 1 |
| 0x00003059 (12377) | Source 1 Mute 2 | uint8 | 1 | R\W | Mute to be applied to source 2 |
| 0x0000305a (12378) | Source 1 Mute 3 | uint8 | 1 | R\W | Mute to be applied to source 3 |
| 0x0000305b (12379) | Source 1 Mute 4 | uint8 | 1 | R\W | Mute to be applied to source 4 |
| 0x0000305c (12380) | Source 2 Mute 1 | uint8 | 1 | R\W | Mute to be applied to source 1 |
| 0x0000305d (12381) | Source 2 Mute 2 | uint8 | 1 | R\W | Mute to be applied to source 2 |
| 0x0000305e (12382) | Source 2 Mute 3 | uint8 | 1 | R\W | Mute to be applied to source 3 |
| 0x0000305f (12383) | Source 2 Mute 4 | uint8 | 1 | R\W | Mute to be applied to source 4 |
| 0x00003060 (12384) | Source 3 Mute 1 | uint8 | 1 | R\W | Mute to be applied to source 1 |
| 0x00003061 (12385) | Source 3 Mute 2 | uint8 | 1 | R\W | Mute to be applied to source 2 |
| 0x00003062 (12386) | Source 3 Mute 3 | uint8 | 1 | R\W | Mute to be applied to source 3 |
| 0x00003063 (12387) | Source 3 Mute 4 | uint8 | 1 | R\W | Mute to be applied to source 4 |
| 0x00003064 (12388) | Source 4 Mute 1 | uint8 | 1 | R\W | Mute to be applied to source 1 |
| 0x00003065 (12389) | Source 4 Mute 2 | uint8 | 1 | R\W | Mute to be applied to source 2 |
| 0x00003066 (12390) | Source 4 Mute 3 | uint8 | 1 | R\W | Mute to be applied to source 3 |
| 0x00003067 (12391) | Source 4 Mute 4 | uint8 | 1 | R\W | Mute to be applied to source 4 |

# User

This area contains informations related to the User block.

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| User Common Settings | 0x00004000 | 0x00004038 | This area contains the user block common settings |
| User EQ | 0x00004100 | 0x00004280 | This area contains the user block common settings |

# User Common Settings

This area contains the user block common settings

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| User Gain | 0x00004000 | 0x00004010 | The user gain in linear |
| User Delay | 0x00004010 | 0x00004020 | The delay shading in seconds |
| User Polarity | 0x00004020 | 0x00004024 | The user polarity |
| User Mute | 0x00004024 | 0x00004028 | The mute shading |
| User Shading | 0x00004028 | 0x00004038 | The user shading |

# User Gain

The user gain in linear

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00004000 (16384) | User Gain 1 | Float | 4 | R\W | The user gain in linear CH 1 |
| 0x00004004 (16388) | User Gain 2 | Float | 4 | R\W | The user gain in linear CH 2 |
| 0x00004008 (16392) | User Gain 3 | Float | 4 | R\W | The user gain in linear CH 3 |
| 0x0000400c (16396) | User Gain 4 | Float | 4 | R\W | The user gain in linear CH 4 |

# User Delay

The delay shading in seconds

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00004010 (16400) | User Delay 1 | Float | 4 | R\W | The user delay in seconds CH 1 |
| 0x00004014 (16404) | User Delay 2 | Float | 4 | R\W | The user delay in seconds CH 2 |
| 0x00004018 (16408) | User Delay 3 | Float | 4 | R\W | The user delay in seconds CH 3 |
| 0x0000401c (16412) | User Delay 4 | Float | 4 | R\W | The user delay in seconds CH 4 |

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# User Polarity

The user polarity

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00004020 (16416) | User Polarity 1 | uint8 | 1 | R\W | The user polarity CH 1 |
| 0x00004021 (16417) | User Polarity 2 | uint8 | 1 | R\W | The user polarity CH 2 |
| 0x00004022 (16418) | User Polarity 3 | uint8 | 1 | R\W | The user polarity CH 3 |
| 0x00004023 (16419) | User Polarity 4 | uint8 | 1 | R\W | The user polarity CH 4 |

# User Mute

The mute shading

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00004024 (16420) | User Mute 1 | uint8 | 1 | R\W | The user mute CH 1 |
| 0x00004025 (16421) | User Mute 2 | uint8 | 1 | R\W | The user mute CH 2 |
| 0x00004026 (16422) | User Mute 3 | uint8 | 1 | R\W | The user mute CH 3 |
| 0x00004027 (16423) | User Mute 4 | uint8 | 1 | R\W | The user mute CH 4 |

# User Shading

The user shading

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00004028 (16424) | User Shading 1 | Float | 4 | R\W | The user shading CH 1 |
| 0x0000402c (16428) | User Shading 2 | Float | 4 | R\W | The user shading CH 2 |
| 0x00004030 (16432) | User Shading 3 | Float | 4 | R\W | The user shading CH 3 |
| 0x00004034 (16436) | User Shading 4 | Float | 4 | R\W | The user shading CH 4 |

# User EQ

This area contains the user block common settings

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| User EQ Channel 1 | 0x00004100 | 0x00004160 | This area contains the user block EQ settings |
| User EQ Channel 2 | 0x00004160 | 0x000041c0 | This area contains the user block EQ settings |
| User EQ Channel 3 | 0x000041c0 | 0x00004220 | This area contains the user block EQ settings |
| User EQ Channel 4 | 0x00004220 | 0x00004280 | This area contains the user block EQ settings |

# User EQ Channel 1

This area contains the user block EQ settings

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| User Eq Channel 1 BiQuad 1 settings | 0x00004100 | 0x00004118 | This area contains the user equalizer biQuad settings. |
| User Eq Channel 1 BiQuad 2 settings | 0x00004118 | 0x00004130 | This area contains the user equalizer biQuad settings. |
| User Eq Channel 1 BiQuad 3 settings | 0x00004130 | 0x00004148 | This area contains the user equalizer biQuad settings. |
| User Eq Channel 1 BiQuad 4 settings | 0x00004148 | 0x00004160 | This area contains the user equalizer biQuad settings. |

# User Eq Channel 1 BiQuad 1 settings

This area contains the user equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00004100 (16640) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x00004104 (16644) | Type | uint32 | 4 | R\W | The filter type. Valid values are: <table><tr><th>Values</th><th>Type</th></tr><tr><td>0</td><td>Peaking</td></tr><tr><td>11</td><td>Low-Shelving</td></tr><tr><td>12</td><td>High-Shelving</td></tr><tr><td>13</td><td>Low-pass</td></tr><tr><td>14</td><td>High-pass</td></tr><tr><td>15</td><td>BandPass</td></tr><tr><td>16</td><td>Band-stop</td></tr><tr><td>17</td><td>All-pass</td></tr></table> |
| 0x00004108 (16648) | Q | Float | 4 | R\W | The filter Q |
| 0x0000410c (16652) | Slope | Float | 4 | R\W | The filter Slope |
| 0x00004110 (16656) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x00004114 (16660) | Gain | Float | 4 | R\W | The linear gain |

# User Eq Channel 1 BiQuad 2 settings

This area contains the user equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00004118 (16664) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x0000411c (16668) | Type | uint32 | 4 | R\W | The filter type. Valid values are: |

The filter type. Valid values are:

| Values | Type |
|---|---|
| 0 | Peaking |
| 11 | Low-Shelving |
| 12 | High-Shelving |
| 13 | Low-pass |
| 14 | High-pass |
| 15 | BandPass |
| 16 | Band-stop |
| 17 | All-pass |

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00004120 (16672) | Q | Float | 4 | R\W | The filter Q |
| 0x00004124 (16676) | Slope | Float | 4 | R\W | The filter Slope |
| 0x00004128 (16680) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x0000412c (16684) | Gain | Float | 4 | R\W | The linear gain |

# User Eq Channel 1 BiQuad 3 settings

This area contains the user equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00004130 (16688) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x00004134 (16692) | Type | uint32 | 4 | R\W | The filter type. Valid values are: |

The filter type. Valid values are:

| Values | Type |
|---|---|
| 0 | Peaking |
| 11 | Low-Shelving |
| 12 | High-Shelving |
| 13 | Low-pass |
| 14 | High-pass |
| 15 | BandPass |
| 16 | Band-stop |
| 17 | All-pass |

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00004138 (16696) | Q | Float | 4 | R\W | The filter Q |
| 0x0000413c (16700) | Slope | Float | 4 | R\W | The filter Slope |
| 0x00004140 (16704) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x00004144 (16708) | Gain | Float | 4 | R\W | The linear gain |

# User Eq Channel 1 BiQuad 4 settings

This area contains the user equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00004148 (16712) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x0000414c (16716) | Type | uint32 | 4 | R\W | The filter type. Valid values are: |
| 0x00004150 (16720) | Q | Float | 4 | R\W | The filter Q |
| 0x00004154 (16724) | Slope | Float | 4 | R\W | The filter Slope |
| 0x00004158 (16728) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x0000415c (16732) | Gain | Float | 4 | R\W | The linear gain |

Within the Type row, the following table appears:

| Values | Type |
|---|---|
| 0 | Peaking |
| 11 | Low-Shelving |
| 12 | High-Shelving |
| 13 | Low-pass |
| 14 | High-pass |
| 15 | BandPass |
| 16 | Band-stop |
| 17 | All-pass |

# User EQ Channel 2

This area contains the user block EQ settings

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| User Eq Channel 2 BiQuad 1 settings | 0x00004160 | 0x00004178 | This area contains the user equalizer biQuad settings. |
| User Eq Channel 2 BiQuad 2 settings | 0x00004178 | 0x00004190 | This area contains the user equalizer biQuad settings. |
| User Eq Channel 2 BiQuad 3 settings | 0x00004190 | 0x000041a8 | This area contains the user equalizer biQuad settings. |
| User Eq Channel 2 BiQuad 4 settings | 0x000041a8 | 0x000041c0 | This area contains the user equalizer biQuad settings. |

# User Eq Channel 2 BiQuad 1 settings

This area contains the user equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x00004160 (16736) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x00004164 (16740) | Type | uint32 | 4 | R\W | The filter type. Valid values are:<br><table><tr><th>Values</th><th>Type</th></tr><tr><td>0</td><td>Peaking</td></tr><tr><td>11</td><td>Low-Shelving</td></tr><tr><td>12</td><td>High-Shelving</td></tr><tr><td>13</td><td>Low-pass</td></tr><tr><td>14</td><td>High-pass</td></tr><tr><td>15</td><td>BandPass</td></tr><tr><td>16</td><td>Band-stop</td></tr><tr><td>17</td><td>All-pass</td></tr></table> |
| 0x00004168 (16744) | Q | Float | 4 | R\W | The filter Q |
| 0x0000416c (16748) | Slope | Float | 4 | R\W | The filter Slope |
| 0x00004170 (16752) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x00004174 (16756) | Gain | Float | 4 | R\W | The linear gain |

# User Eq Channel 2 BiQuad 2 settings

This area contains the user equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x00004178 (16760) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x0000417c (16764) | Type | uint32 | 4 | R\W | The filter type. Valid values are:<br><table><tr><th>Values</th><th>Type</th></tr><tr><td>0</td><td>Peaking</td></tr><tr><td>11</td><td>Low-Shelving</td></tr><tr><td>12</td><td>High-Shelving</td></tr><tr><td>13</td><td>Low-pass</td></tr><tr><td>14</td><td>High-pass</td></tr><tr><td>15</td><td>BandPass</td></tr><tr><td>16</td><td>Band-stop</td></tr><tr><td>17</td><td>All-pass</td></tr></table> |
| 0x00004180 (16768) | Q | Float | 4 | R\W | The filter Q |
| 0x00004184 (16772) | Slope | Float | 4 | R\W | The filter Slope |
| 0x00004188 (16776) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x0000418c (16780) | Gain | Float | 4 | R\W | The linear gain |

# User Eq Channel 2 BiQuad 3 settings

This area contains the user equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00004190 (16784) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x00004194 (16788) | Type | uint32 | 4 | R\W | The filter type. Valid values are: |

| Values | Type |
|---|---|
| 0 | Peaking |
| 11 | Low-Shelving |
| 12 | High-Shelving |
| 13 | Low-pass |
| 14 | High-pass |
| 15 | BandPass |
| 16 | Band-stop |
| 17 | All-pass |

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00004198 (16792) | Q | Float | 4 | R\W | The filter Q |
| 0x0000419c (16796) | Slope | Float | 4 | R\W | The filter Slope |
| 0x000041a0 (16800) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x000041a4 (16804) | Gain | Float | 4 | R\W | The linear gain |

# User Eq Channel 2 BiQuad 4 settings

This area contains the user equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x000041a8 (16808) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x000041ac (16812) | Type | uint32 | 4 | R\W | The filter type. Valid values are: |

| Values | Type |
|---|---|
| 0 | Peaking |
| 11 | Low-Shelving |
| 12 | High-Shelving |
| 13 | Low-pass |
| 14 | High-pass |
| 15 | BandPass |
| 16 | Band-stop |
| 17 | All-pass |

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x000041b0 (16816) | Q | Float | 4 | R\W | The filter Q |
| 0x000041b4 (16820) | Slope | Float | 4 | R\W | The filter Slope |
| 0x000041b8 (16824) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x000041bc (16828) | Gain | Float | 4 | R\W | The linear gain |

# User EQ Channel 3

This area contains the user block EQ settings

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| User Eq Channel 3 BiQuad 1 settings | 0x000041c0 | 0x000041d8 | This area contains the user equalizer biQuad settings. |
| User Eq Channel 3 BiQuad 2 settings | 0x000041d8 | 0x000041f0 | This area contains the user equalizer biQuad settings. |
| User Eq Channel 3 BiQuad 3 settings | 0x000041f0 | 0x00004208 | This area contains the user equalizer biQuad settings. |
| User Eq Channel 3 BiQuad 4 settings | 0x00004208 | 0x00004220 | This area contains the user equalizer biQuad settings. |

# User Eq Channel 3 BiQuad 1 settings

This area contains the user equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x000041c0 (16832) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x000041c4 (16836) | Type | uint32 | 4 | R\W | The filter type. Valid values are: |
| 0x000041c8 (16840) | Q | Float | 4 | R\W | The filter Q |
| 0x000041cc (16844) | Slope | Float | 4 | R\W | The filter Slope |
| 0x000041d0 (16848) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x000041d4 (16852) | Gain | Float | 4 | R\W | The linear gain |

Values for Type:

| Values | Type |
|---|---|
| 0 | Peaking |
| 11 | Low-Shelving |
| 12 | High-Shelving |
| 13 | Low-pass |
| 14 | High-pass |
| 15 | BandPass |
| 16 | Band-stop |
| 17 | All-pass |

# User Eq Channel 3 BiQuad 2 settings

This area contains the user equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x000041d8 (16856) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x000041dc (16860) | Type | uint32 | 4 | R\W | The filter type. Valid values are: |

| Values | Type |
|---|---|
| 0 | Peaking |
| 11 | Low-Shelving |
| 12 | High-Shelving |
| 13 | Low-pass |
| 14 | High-pass |
| 15 | BandPass |
| 16 | Band-stop |
| 17 | All-pass |

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x000041e0 (16864) | Q | Float | 4 | R\W | The filter Q |
| 0x000041e4 (16868) | Slope | Float | 4 | R\W | The filter Slope |
| 0x000041e8 (16872) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x000041ec (16876) | Gain | Float | 4 | R\W | The linear gain |

# User Eq Channel 3 BiQuad 3 settings

This area contains the user equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x000041f0 (16880) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x000041f4 (16884) | Type | uint32 | 4 | R\W | The filter type. Valid values are: |

| Values | Type |
|---|---|
| 0 | Peaking |
| 11 | Low-Shelving |
| 12 | High-Shelving |
| 13 | Low-pass |
| 14 | High-pass |
| 15 | BandPass |
| 16 | Band-stop |
| 17 | All-pass |

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x000041f8 (16888) | Q | Float | 4 | R\W | The filter Q |
| 0x000041fc (16892) | Slope | Float | 4 | R\W | The filter Slope |
| 0x00004200 (16896) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x00004204 (16900) | Gain | Float | 4 | R\W | The linear gain |

# User Eq Channel 3 BiQuad 4 settings

This area contains the user equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00004208 (16904) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x0000420c (16908) | Type | uint32 | 4 | R\W | The filter type. Valid values are: |

| Values | Type |
|---|---|
| 0 | Peaking |
| 11 | Low-Shelving |
| 12 | High-Shelving |
| 13 | Low-pass |
| 14 | High-pass |
| 15 | BandPass |
| 16 | Band-stop |
| 17 | All-pass |

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00004210 (16912) | Q | Float | 4 | R\W | The filter Q |
| 0x00004214 (16916) | Slope | Float | 4 | R\W | The filter Slope |
| 0x00004218 (16920) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x0000421c (16924) | Gain | Float | 4 | R\W | The linear gain |

# User EQ Channel 4

This area contains the user block EQ settings

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| User Eq Channel 4 BiQuad 1 settings | 0x00004220 | 0x00004238 | This area contains the user equalizer biQuad settings. |
| User Eq Channel 4 BiQuad 2 settings | 0x00004238 | 0x00004250 | This area contains the user equalizer biQuad settings. |
| User Eq Channel 4 BiQuad 3 settings | 0x00004250 | 0x00004268 | This area contains the user equalizer biQuad settings. |
| User Eq Channel 4 BiQuad 4 settings | 0x00004268 | 0x00004280 | This area contains the user equalizer biQuad settings. |

# User Eq Channel 4 BiQuad 1 settings

This area contains the user equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00004220 (16928) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x00004224 (16932) | Type | uint32 | 4 | R\W | The filter type. Valid values are: |

| Values | Type |
|---|---|
| 0 | Peaking |
| 11 | Low-Shelving |
| 12 | High-Shelving |
| 13 | Low-pass |
| 14 | High-pass |
| 15 | BandPass |
| 16 | Band-stop |
| 17 | All-pass |

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00004228 (16936) | Q | Float | 4 | R\W | The filter Q |
| 0x0000422c (16940) | Slope | Float | 4 | R\W | The filter Slope |
| 0x00004230 (16944) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x00004234 (16948) | Gain | Float | 4 | R\W | The linear gain |

# User Eq Channel 4 BiQuad 2 settings

This area contains the user equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00004238 (16952) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x0000423c (16956) | Type | uint32 | 4 | R\W | The filter type. Valid values are: |

| Values | Type |
|---|---|
| 0 | Peaking |
| 11 | Low-Shelving |
| 12 | High-Shelving |
| 13 | Low-pass |
| 14 | High-pass |
| 15 | BandPass |
| 16 | Band-stop |
| 17 | All-pass |

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00004240 (16960) | Q | Float | 4 | R\W | The filter Q |
| 0x00004244 (16964) | Slope | Float | 4 | R\W | The filter Slope |
| 0x00004248 (16968) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x0000424c (16972) | Gain | Float | 4 | R\W | The linear gain |

# User Eq Channel 4 BiQuad 3 settings

This area contains the user equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x00004250 (16976) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x00004254 (16980) | Type | uint32 | 4 | R\W | The filter type. Valid values are: |

The filter type. Valid values are:

| Values | Type |
|--------|------|
| 0 | Peaking |
| 11 | Low-Shelving |
| 12 | High-Shelving |
| 13 | Low-pass |
| 14 | High-pass |
| 15 | BandPass |
| 16 | Band-stop |
| 17 | All-pass |

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x00004258 (16984) | Q | Float | 4 | R\W | The filter Q |
| 0x0000425c (16988) | Slope | Float | 4 | R\W | The filter Slope |
| 0x00004260 (16992) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x00004264 (16996) | Gain | Float | 4 | R\W | The linear gain |

# User Eq Channel 4 BiQuad 4 settings

This area contains the user equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x00004268 (17000) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x0000426c (17004) | Type | uint32 | 4 | R\W | The filter type. Valid values are: |

The filter type. Valid values are:

| Values | Type |
|--------|------|
| 0 | Peaking |
| 11 | Low-Shelving |
| 12 | High-Shelving |
| 13 | Low-pass |
| 14 | High-pass |
| 15 | BandPass |
| 16 | Band-stop |
| 17 | All-pass |

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x00004270 (17008) | Q | Float | 4 | R\W | The filter Q |
| 0x00004274 (17012) | Slope | Float | 4 | R\W | The filter Slope |
| 0x00004278 (17016) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x0000427c (17020) | Gain | Float | 4 | R\W | The linear gain |

# Speaker Layout

This area contains informations related to the output routing.

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| Routing Configuration | 0x00005000 | 0x00005004 | This area contains informations related to the output routing. |
| Speaker Settings | 0x00005004 | 0x000062f4 | This area contains informations related to the output routing. |

# Routing Configuration

This area contains informations related to the output routing.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00005000 (20480) | Routing | uint8[4] | 4 | R\W | byte[4] [0,1,2,3] -> means 4 different speakers (66051 uint) |

# Speaker Settings

This area contains informations related to the output routing.

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| Speaker Description | 0x00005004 | 0x00005644 | Speaker Description |
| Brand Name | 0x00005644 | 0x000057d4 | Brand name |
| Family Name | 0x000057d4 | 0x00005964 | Family Name |
| Model Name | 0x00005964 | 0x00005af4 | Model Name |
| Application Name | 0x00005af4 | 0x00005c84 | Application Name |
| Speaker Note | 0x00005c84 | 0x000062c4 | Speaker Note |
| Speaker Type | 0x000062c4 | 0x000062d4 | Speaker Type |
| Preset Type | 0x000062d4 | 0x000062e4 | Preset Type |
| Is HiZ Active | 0x000062e4 | 0x000062f4 | Is HiZ Active |

# Speaker Description

Speaker Description

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00005004 (20484) | Speaker Description Speaker 1 | char[400] | 400 | R\W | Speaker Description for speaker 1 |
| 0x00005194 (20884) | Speaker Description Speaker 2 | char[400] | 400 | R\W | Speaker Description for speaker 2 |
| 0x00005324 (21284) | Speaker Description Speaker 3 | char[400] | 400 | R\W | Speaker Description for speaker 3 |
| 0x000054b4 (21684) | Speaker Description Speaker 4 | char[400] | 400 | R\W | Speaker Description for speaker 4 |

# Brand Name

Brand name

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00005644 (22084) | Brand Name Speaker 1 | char[100] | 100 | R\W | Brand name for speaker 1 |
| 0x000056a8 (22184) | Brand Name Speaker 2 | char[100] | 100 | R\W | Brand name for speaker 2 |
| 0x0000570c (22284) | Brand Name Speaker 3 | char[100] | 100 | R\W | Brand name for speaker 3 |
| 0x00005770 (22384) | Brand Name Speaker 4 | char[100] | 100 | R\W | Brand name for speaker 4 |

# Family Name

Family Name

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x000057d4 (22484) | Family Name Speaker 1 | char[100] | 100 | R\W | Family name for speaker 1 |
| 0x00005838 (22584) | Family Name Speaker 2 | char[100] | 100 | R\W | Family name for speaker 2 |
| 0x0000589c (22684) | Family Name Speaker 3 | char[100] | 100 | R\W | Family name for speaker 3 |
| 0x00005900 (22784) | Family Name Speaker 4 | char[100] | 100 | R\W | Family name for speaker 4 |

# Model Name

Model Name

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00005964 (22884) | Model Name Speaker 1 | char[100] | 100 | R\W | Model Name for speaker 1 |
| 0x000059c8 (22984) | Model Name Speaker 2 | char[100] | 100 | R\W | Model Name for speaker 2 |
| 0x00005a2c (23084) | Model Name Speaker 3 | char[100] | 100 | R\W | Model Name for speaker 3 |
| 0x00005a90 (23184) | Model Name Speaker 4 | char[100] | 100 | R\W | Model Name for speaker 4 |

# Application Name

Application Name

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00005af4 (23284) | Application Name Speaker 1 | char[100] | 100 | R\W | Application Name for speaker 1 |
| 0x00005b58 (23384) | Application Name Speaker 2 | char[100] | 100 | R\W | Application Name for speaker 2 |
| 0x00005bbc (23484) | Application Name Speaker 3 | char[100] | 100 | R\W | Application Name for speaker 3 |
| 0x00005c20 (23584) | Application Name Speaker 4 | char[100] | 100 | R\W | Application Name for speaker 4 |

# Speaker Note

Speaker Note

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00005c84 (23684) | Speaker Note Speaker 1 | char[400] | 400 | R\W | Speaker Note for speaker 1 |
| 0x00005e14 (24084) | Speaker Note Speaker 2 | char[400] | 400 | R\W | Speaker Note for speaker 2 |
| 0x00005fa4 (24484) | Speaker Note Speaker 3 | char[400] | 400 | R\W | Speaker Note for speaker 3 |
| 0x00006134 (24884) | Speaker Note Speaker 4 | char[400] | 400 | R\W | Speaker Note for speaker 4 |

# Speaker Type

Speaker Type

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x000062c4 (25284) | Speaker Type Speaker 1 | int32 | 4 | R\W | Speaker Type for speaker 1 |
| 0x000062c8 (25288) | Speaker Type Speaker 2 | int32 | 4 | R\W | Speaker Type for speaker 2 |
| 0x000062cc (25292) | Speaker Type Speaker 3 | int32 | 4 | R\W | Speaker Type for speaker 3 |
| 0x000062d0 (25296) | Speaker Type Speaker 4 | int32 | 4 | R\W | Speaker Type for speaker 4 |

# Preset Type

Preset Type

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x000062d4 (25300) | Preset Type Speaker 1 | int32 | 4 | R\W | Preset Type for speaker 1 |
| 0x000062d8 (25304) | Preset Type Speaker 2 | int32 | 4 | R\W | Preset Type for speaker 2 |
| 0x000062dc (25308) | Preset Type Speaker 3 | int32 | 4 | R\W | Preset Type for speaker 3 |
| 0x000062e0 (25312) | Preset Type Speaker 4 | int32 | 4 | R\W | Preset Type for speaker 4 |

# Is HiZ Active

Is HiZ Active

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x000062e4 (25316) | Is HiZ Active Speaker 1 | uint32 | 4 | R\W | Is HiZ Active for speaker 1 |
| 0x000062e8 (25320) | Is HiZ Active Speaker 2 | uint32 | 4 | R\W | Is HiZ Active for speaker 2 |
| 0x000062ec (25324) | Is HiZ Active Speaker 3 | uint32 | 4 | R\W | Is HiZ Active for speaker 3 |
| 0x000062f0 (25328) | Is HiZ Active Speaker 4 | uint32 | 4 | R\W | Is HiZ Active for speaker 4 |

# Ways

This area contains informations related to the amplifiers ways.

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| Way Common settings | 0x00007000 | 0x000070a0 | This area contains the way common settings. |
| Diagnostic | 0x00007890 | 0x00007940 | Ways Diagnostic area |
| Auto Setup Apply | 0x00007940 | 0x00007950 | Ways autosetup applied parameters area |

# Way Common settings

This area contains the way common settings.

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| Is Autosetupable | 0x00007000 | 0x00007010 | This is the out autsetup capable of way - 1 if Autosetupable - else 0 |
| Way gain | 0x00007010 | 0x00007020 | The way gain in linear |
| Way delay | 0x00007020 | 0x00007030 | The way delay in seconds |
| Way polarity | 0x00007030 | 0x00007040 | The way polarity |
| Way mute | 0x00007040 | 0x00007050 | The way mute |
| Way Name | 0x00007050 | 0x00007090 | Way Name |
| Way State | 0x00007090 | 0x000070a0 | Way State |

# Is Autosetupable

This is the out autsetup capable of way - 1 if Autosetupable - else 0

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00007000 (28672) | Way 1 Is Autosetupable | uint32 | 4 | R\W | This is the out autsetup capable of way - 1 if Autosetupable - else 0 |
| 0x00007004 (28676) | Way 2 Is Autosetupable | uint32 | 4 | R\W | This is the out autsetup capable of way - 1 if Autosetupable - else 0 |
| 0x00007008 (28680) | Way 3 Is Autosetupable | uint32 | 4 | R\W | This is the out autsetup capable of way - 1 if Autosetupable - else 0 |
| 0x0000700c (28684) | Way 4 Is Autosetupable | uint32 | 4 | R\W | This is the out autsetup capable of way - 1 if Autosetupable - else 0 |

# Way gain

The way gain in linear

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00007010 (28688) | Way 1 gain | Float | 4 | R\W | The way gain in linear |
| 0x00007014 (28692) | Way 2 gain | Float | 4 | R\W | The way gain in linear |
| 0x00007018 (28696) | Way 3 gain | Float | 4 | R\W | The way gain in linear |
| 0x0000701c (28700) | Way 4 gain | Float | 4 | R\W | The way gain in linear |

# Way delay

The way delay in seconds

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00007020 (28704) | Way 1 delay | Float | 4 | R\W | The way delay in seconds |
| 0x00007024 (28708) | Way 2 delay | Float | 4 | R\W | The way delay in seconds |
| 0x00007028 (28712) | Way 3 delay | Float | 4 | R\W | The way delay in seconds |
| 0x0000702c (28716) | Way 4 delay | Float | 4 | R\W | The way delay in seconds |

# Way polarity

The way polarity

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00007030 (28720) | Way 1 polarity | uint32 | 4 | R\W | The way polarity |
| 0x00007034 (28724) | Way 2 polarity | uint32 | 4 | R\W | The way polarity |
| 0x00007038 (28728) | Way 3 polarity | uint32 | 4 | R\W | The way polarity |
| 0x0000703c (28732) | Way 4 polarity | uint32 | 4 | R\W | The way polarity |

# Way mute

The way mute

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00007040 (28736) | Way 1 mute | uint32 | 4 | R\W | The way mute |
| 0x00007044 (28740) | Way 2 mute | uint32 | 4 | R\W | The way mute |
| 0x00007048 (28744) | Way 3 mute | uint32 | 4 | R\W | The way mute |
| 0x0000704c (28748) | Way 4 mute | uint32 | 4 | R\W | The way mute |

# Way Name

Way Name

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00007050 (28752) | Way Name Way 1 | char[16] | 16 | R\W | Way Name for way 1 |
| 0x00007060 (28768) | Way Name Way 2 | char[16] | 16 | R\W | Way Name for way 2 |
| 0x00007070 (28784) | Way Name Way 3 | char[16] | 16 | R\W | Way Name for way 3 |
| 0x00007080 (28800) | Way Name Way 4 | char[16] | 16 | R\W | Way Name for way 4 |

# Way State

Way State

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x00007090 (28816) | Way State Way 1 | uint32 | 4 | R\W | Way State for way 1 |
| 0x00007094 (28820) | Way State Way 2 | uint32 | 4 | R\W | Way State for way 2 |
| 0x00007098 (28824) | Way State Way 3 | uint32 | 4 | R\W | Way State for way 3 |
| 0x0000709c (28828) | Way State Way 4 | uint32 | 4 | R\W | Way State for way 4 |

# Diagnostic

Ways Diagnostic area

| BlockId | Start Address | End Address | Description |
|---------|---------------|-------------|-------------|
| Diagnostic Pilot Tone Generator | 0x00007890 | 0x000078b4 | Pilot Tone Generator area |
| Diagnostic Pilot Tone | 0x000078b4 | 0x000078e8 | Pilot Tone area |
| Diagnostic Load Monitor | 0x000078e8 | 0x0000791c | Load Monitor area |

# Diagnostic Pilot Tone Generator

Pilot Tone Generator area

| BlockId | Start Address | End Address | Description |
|---------|---------------|-------------|-------------|
| Way Pilot Tone Generator Enable | 0x00007890 | 0x00007894 | Pilot Tone Generator Enable for way |
| Way Pilot Tone Generator Frequency | 0x00007894 | 0x000078a4 | Pilot Tone Generator Frequency for way |
| Way Pilot Tone Generator Amplitude | 0x000078a4 | 0x000078b4 | Pilot Tone Generator Amplitude for way |

# Way Pilot Tone Generator Enable

Pilot Tone Generator Enable for way

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x00007890 (30864) | Way 1 Pilot Tone Generator Enable | uint8 | 1 | R\W | Pilot Tone Generator Enable for way 1 |
| 0x00007891 (30865) | Way 2 Pilot Tone Generator Enable | uint8 | 1 | R\W | Pilot Tone Generator Enable for way 2 |
| 0x00007892 (30866) | Way 3 Pilot Tone Generator Enable | uint8 | 1 | R\W | Pilot Tone Generator Enable for way 3 |
| 0x00007893 (30867) | Way 4 Pilot Tone Generator Enable | uint8 | 1 | R\W | Pilot Tone Generator Enable for way 4 |

# Way Pilot Tone Generator Frequency

Pilot Tone Generator Frequency for way

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00007894 (30868) | Way 1 Pilot Tone Generator Frequency | Float | 4 | R\W | Pilot Tone Generator Frequency for way 1. Frequency may be rounded to closest integer in order to enhance performances. |
| 0x00007898 (30872) | Way 2 Pilot Tone Generator Frequency | Float | 4 | R\W | Pilot Tone Generator Frequency for way 2. Frequency may be rounded to closest integer in order to enhance performances. |
| 0x0000789c (30876) | Way 3 Pilot Tone Generator Frequency | Float | 4 | R\W | Pilot Tone Generator Frequency for way 3. Frequency may be rounded to closest integer in order to enhance performances. |
| 0x000078a0 (30880) | Way 4 Pilot Tone Generator Frequency | Float | 4 | R\W | Pilot Tone Generator Frequency for way 4. Frequency may be rounded to closest integer in order to enhance performances. |

# Way Pilot Tone Generator Amplitude

Pilot Tone Generator Amplitude for way

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x000078a4 (30884) | Way 1 Pilot Tone Generator Amplitude | Float | 4 | R\W | Pilot Tone Generator Amplitude for way 1 |
| 0x000078a8 (30888) | Way 2 Pilot Tone Generator Amplitude | Float | 4 | R\W | Pilot Tone Generator Amplitude for way 2 |
| 0x000078ac (30892) | Way 3 Pilot Tone Generator Amplitude | Float | 4 | R\W | Pilot Tone Generator Amplitude for way 3 |
| 0x000078b0 (30896) | Way 4 Pilot Tone Generator Amplitude | Float | 4 | R\W | Pilot Tone Generator Amplitude for way 4 |

# Diagnostic Pilot Tone

Pilot Tone area

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| Way Pilot Tone Enable | 0x000078b4 | 0x000078b8 | Pilot Tone area |
| Way Pilot Tone Frequency | 0x000078b8 | 0x000078c8 | Pilot Tone Frequency for way |
| Way Pilot Tone Lowth | 0x000078c8 | 0x000078d8 | Pilot Tone Lowth for way |
| Way Pilot Tone Highth | 0x000078d8 | 0x000078e8 | Pilot Tone Highth for way |

# Way Pilot Tone Enable

Pilot Tone area

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x000078b4 (30900) | Way 1 Pilot Tone Enable | uint8 | 1 | R\W | Pilot Tone Enable for way 1 |
| 0x000078b5 (30901) | Way 2 Pilot Tone Enable | uint8 | 1 | R\W | Pilot Tone Enable for way 2 |
| 0x000078b6 (30902) | Way 3 Pilot Tone Enable | uint8 | 1 | R\W | Pilot Tone Enable for way 3 |
| 0x000078b7 (30903) | Way 4 Pilot Tone Enable | uint8 | 1 | R\W | Pilot Tone Enable for way 4 |

# Way Pilot Tone Frequency

Pilot Tone Frequency for way

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x000078b8 (30904) | Way 1 Pilot Tone Frequency | Float | 4 | R\W | Pilot Tone Frequency for way 1. Frequency may be rounded to closest integer in order to enhance performances. |
| 0x000078bc (30908) | Way 2 Pilot Tone Frequency | Float | 4 | R\W | Pilot Tone Frequency for way 2. Frequency may be rounded to closest integer in order to enhance performances. |
| 0x000078c0 (30912) | Way 3 Pilot Tone Frequency | Float | 4 | R\W | Pilot Tone Frequency for way 3. Frequency may be rounded to closest integer in order to enhance performances. |
| 0x000078c4 (30916) | Way 4 Pilot Tone Frequency | Float | 4 | R\W | Pilot Tone Frequency for way 4. Frequency may be rounded to closest integer in order to enhance performances. |

# Way Pilot Tone Lowth

Pilot Tone Lowth for way

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x000078c8 (30920) | Way 1 Pilot Tone Lowth | Float | 4 | R\W | Pilot Tone Lowth for way 1 |
| 0x000078cc (30924) | Way 2 Pilot Tone Lowth | Float | 4 | R\W | Pilot Tone Lowth for way 2 |
| 0x000078d0 (30928) | Way 3 Pilot Tone Lowth | Float | 4 | R\W | Pilot Tone Lowth for way 3 |
| 0x000078d4 (30932) | Way 4 Pilot Tone Lowth | Float | 4 | R\W | Pilot Tone Lowth for way 4 |

# Way Pilot Tone Highth

Pilot Tone Highth for way

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x000078d8 (30936) | Way 1 Pilot Tone Highth | Float | 4 | R\W | Pilot Tone Highth for way 1 |
| 0x000078dc (30940) | Way 2 Pilot Tone Highth | Float | 4 | R\W | Pilot Tone Highth for way 2 |
| 0x000078e0 (30944) | Way 3 Pilot Tone Highth | Float | 4 | R\W | Pilot Tone Highth for way 3 |
| 0x000078e4 (30948) | Way 4 Pilot Tone Highth | Float | 4 | R\W | Pilot Tone Highth for way 4 |

# Diagnostic Load Monitor

Load Monitor area

| BlockId | Start Address | End Address | Description |
|---------|---------------|-------------|-------------|
| Way Load Monitor Enable | 0x000078e8 | 0x000078ec | Load Monitor Enable for way |
| Way Load Monitor Frequency | 0x000078ec | 0x000078fc | Load Monitor Frequency for way |
| Way Load Monitor Lowth | 0x000078fc | 0x0000790c | Load Monitor Lowth for way |
| Way Load Monitor Highth | 0x0000790c | 0x0000791c | Load Monitor Highth for way |

# Way Load Monitor Enable

Load Monitor Enable for way

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x000078e8 (30952) | Way Load Monitor Enable Way 1 | uint8 | 1 | R\W | Load Monitor Enable for way 1 |
| 0x000078e9 (30953) | Way Load Monitor Enable Way 2 | uint8 | 1 | R\W | Load Monitor Enable for way 2 |
| 0x000078ea (30954) | Way Load Monitor Enable Way 3 | uint8 | 1 | R\W | Load Monitor Enable for way 3 |
| 0x000078eb (30955) | Way Load Monitor Enable Way 4 | uint8 | 1 | R\W | Load Monitor Enable for way 4 |

# Way Load Monitor Frequency

Load Monitor Frequency for way

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x000078ec (30956) | Way Load Monitor Frequency Way 1 | Float | 4 | R\W | Load Monitor Frequency for way 1. Frequency may be rounded to closest integer in order to enhance performances. |
| 0x000078f0 (30960) | Way Load Monitor Frequency Way 2 | Float | 4 | R\W | Load Monitor Frequency for way 2. Frequency may be rounded to closest integer in order to enhance performances. |
| 0x000078f4 (30964) | Way Load Monitor Frequency Way 3 | Float | 4 | R\W | Load Monitor Frequency for way 3. Frequency may be rounded to closest integer in order to enhance performances. |
| 0x000078f8 (30968) | Way Load Monitor Frequency Way 4 | Float | 4 | R\W | Load Monitor Frequency for way 4. Frequency may be rounded to closest integer in order to enhance performances. |

# Way Load Monitor Lowth

Load Monitor Lowth for way

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x000078fc (30972) | Way Load Monitor Lowth Way 1 | Float | 4 | R\W | Load Monitor Lowth for way 1 |
| 0x00007900 (30976) | Way Load Monitor Lowth Way 2 | Float | 4 | R\W | Load Monitor Lowth for way 2 |
| 0x00007904 (30980) | Way Load Monitor Lowth Way 3 | Float | 4 | R\W | Load Monitor Lowth for way 3 |
| 0x00007908 (30984) | Way Load Monitor Lowth Way 4 | Float | 4 | R\W | Load Monitor Lowth for way 4 |

# Way Load Monitor Highth

Load Monitor Highth for way

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000790c (30988) | Way Load Monitor Highth Way 1 | Float | 4 | R\W | Load Monitor Highth for way 1 |
| 0x00007910 (30992) | Way Load Monitor Highth Way 2 | Float | 4 | R\W | Load Monitor Highth for way 2 |
| 0x00007914 (30996) | Way Load Monitor Highth Way 3 | Float | 4 | R\W | Load Monitor Highth for way 3 |
| 0x00007918 (31000) | Way Load Monitor Highth Way 4 | Float | 4 | R\W | Load Monitor Highth for way 4 |

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# Auto Setup Apply

Ways autosetup applied parameters area

| BlockId | Start Address | End Address | Description |
|---------|---------------|-------------|-------------|
| Gain | 0x00007940 | 0x00007950 | The gain |

## Gain

The gain

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x00007940 (31040) | AutoSetup Gain Way 1 | float | 4 | R | AutoSetup Gain for way 1 |
| 0x00007944 (31044) | AutoSetup Gain Way 2 | float | 4 | R | AutoSetup Gain for way 2 |
| 0x00007948 (31048) | AutoSetup Gain Way 3 | float | 4 | R | AutoSetup Gain for way 3 |
| 0x0000794c (31052) | AutoSetup Gain Way 4 | float | 4 | R | AutoSetup Gain for way 4 |

## Dante routing

This area contains informations related to Dante Routing.

| BlockId | Start Address | End Address | Description |
|---------|---------------|-------------|-------------|
| Gain | 0x00008500 | 0x00008510 | Dante route gain for output |
| DspTapType | 0x00008510 | 0x00008514 | Dante route dsp tap type for output |
| Channel | 0x00008514 | 0x00008518 | Dante route channel for output |

## Gain

Dante route gain for output

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x00008500 (34048) | Out 1 Dante Route Gain | float | 4 | R\W | Dante route gain for output 1 |
| 0x00008504 (34052) | Out 2 Dante Route Gain | float | 4 | R\W | Dante route gain for output 2 |
| 0x00008508 (34056) | Out 3 Dante Route Gain | float | 4 | R\W | Dante route gain for output 3 |
| 0x0000850c (34060) | Out 4 Dante Route Gain | float | 4 | R\W | Dante route gain for output 4 |

# DspTapType

Dante route dsp tap type for output

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x00008510 (34064) | Out 1 Dante Route DspTapType | uint8 | 1 | R\W | Dante route dsp tap type for output 1 |
| 0x00008511 (34065) | Out 2 Dante Route DspTapType | uint8 | 1 | R\W | Dante route dsp tap type for output 2 |
| 0x00008512 (34066) | Out 3 Dante Route DspTapType | uint8 | 1 | R\W | Dante route dsp tap type for output 3 |
| 0x00008513 (34067) | Out 4 Dante Route DspTapType | uint8 | 1 | R\W | Dante route dsp tap type for output 4 |

# Channel

Dante route channel for output

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x00008514 (34068) | Out 1 Dante Route Channel | uint8 | 1 | R\W | Dante route channel for output 1 |
| 0x00008515 (34069) | Out 2 Dante Route Channel | uint8 | 1 | R\W | Dante route channel for output 2 |
| 0x00008516 (34070) | Out 3 Dante Route Channel | uint8 | 1 | R\W | Dante route channel for output 3 |
| 0x00008517 (34071) | Out 4 Dante Route Channel | uint8 | 1 | R\W | Dante route channel for output 4 |

# GPI configuration

This area contains informations related to GPI.

| BlockId | Start Address | End Address | Description |
|---------|---------------|-------------|-------------|
| Mode | 0x00009000 | 0x00009004 | Mode configuration for GPI |

# Mode

Mode configuration for GPI

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00009000 (36864) | GPI 1 Mode | uint8 | 1 | R\W | Describes the configuration of GPI. <br><br> **Code** / **Mode**: <br> 00 — Gain : the GPI is used to control the relative channel gain. <br> 01 — Other : the GPI is used to control another function. |
| 0x00009001 (36865) | GPI 2 Mode | uint8 | 1 | R\W | Describes the configuration of GPI. <br><br> **Code** / **Mode**: <br> 00 — Gain : the GPI is used to control the relative channel gain. <br> 01 — Other : the GPI is used to control another function. |
| 0x00009002 (36866) | GPI 3 Mode | uint8 | 1 | R\W | Describes the configuration of GPI. <br><br> **Code** / **Mode**: <br> 00 — Gain : the GPI is used to control the relative channel gain. <br> 01 — Other : the GPI is used to control another function. |
| 0x00009003 (36867) | GPI 4 Mode | uint8 | 1 | R\W | Describes the configuration of GPI. <br><br> **Code** / **Mode**: <br> 00 — Gain : the GPI is used to control the relative channel gain. <br> 01 — Other : the GPI is used to control another function. |

# GPO configuration

This area contains informations related to GPO.

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| Relay | 0x00009e00 | 0x00009e0c | Configuration for Relay |

# Relay

Configuration for Relay

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x00009e00 (40448) | Relay mode | uint32 | 4 | R\W | Describes the configuration of relay. |
| 0x00009e08 (40456) | Relay Set State | uint32 | 4 | R\W | If Relay Mode is Manual set 0 to open Relay, set 1 to close it. |

Within the Relay mode Description:

| Code | Mode |
|------|------|
| 00 | Automatic : open relay when faults indicated by fault masks happens. |
| 01 | Manual : set and clear relay from protocol depending on Relay State field. |

# Power config

This area contains informations related to Standby and Power Configuration.

| BlockId | Start Address | End Address | Description |
|---------|---------------|-------------|-------------|
| Standby | 0x0000a000 | 0x0000a00c | Amplifier standby commands |

# Standby

Amplifier standby commands

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000a000 (40960) | Standby trigger | uint32 | 4 | W | If set to '1' activates the standby if set to '0' deactivates it |
| 0x0000a004 (40964) | Auto turn on enable | uint32 | 4 | R\W | |
| 0x0000a008 (40968) | Auto Power Down Enable | uint32 | 4 | R\W | If set to '1' activates the automatic standby, entering in standby state after 25 minutes without input signal. if set to '0' the amplifier will not enter in automatic standby. |

# Readings

This area contains informations related to amplifier readings like meters.

| BlockId | Start Address | End Address | Description |
|---------|---------------|-------------|-------------|
| Slow Meters | 0x0000b000 | 0x0000b710 | This area contains the slow meters. |
| Fast Meters | 0x0000b800 | 0x0000bbd0 | This area contains the fast meters. |

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# Slow Meters

This area contains the slow meters.

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| SlowMeter Ali | 0x0000b000 | 0x0000b020 | This area contains the Ali slow meters. |
| SlowMeter Ampli Channels | 0x0000b0f4 | 0x0000b104 | This area contains the Ampli slow meters. |
| SlowMeter SourceSelection | 0x0000b300 | 0x0000b360 | This area contains the SourceSelection slow meters. |
| SlowMeter Ways | 0x0000b478 | 0x0000b4d8 | This area contains the Ways slow meters. |
| SlowMeter PreWays | 0x0000b5e8 | 0x0000b608 | This area contains the PreWays meters. |
| SlowMeter Standby State | 0x0000b638 | 0x0000b63c | This area contains the Standby State slow meters. |
| SlowMeter ChannelAlarmStatuses | 0x0000b63c | 0x0000b650 | This area contains the ChannelAlarmStatuses slow meters. |
| SlowMeter AlarmStatus | 0x0000b650 | 0x0000b65c | This area contains the AlarmStatus slow meters. |
| SlowMeter MuteCodes | 0x0000b700 | 0x0000b710 | This area contains the mute codes slow meters. |

# SlowMeter Ali

This area contains the Ali slow meters.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000b000 (45056) | TempTrasf | Float | 4 | R | Reads the TempTrasf |
| 0x0000b004 (45060) | TempHeatSink | Float | 4 | R | Reads the TempHeatSink |
| 0x0000b008 (45064) | VMainsRms | Float | 4 | R | Reads the VMainsRms |
| 0x0000b00c (45068) | VccP | Float | 4 | R | Reads the VccP |
| 0x0000b010 (45072) | VccN | Float | 4 | R | Reads the VccN |
| 0x0000b014 (45076) | FanCurrent | Float | 4 | R | Reads the FanCurrent |
| 0x0000b018 (45080) | VAuxP | Float | 4 | R | Reads the VAuxP |
| 0x0000b01c (45084) | VAuxN | Float | 4 | R | Reads the VAuxN |

# SlowMeter Ampli Channels

This area contains the Ampli slow meters.

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| SlowMeter Ampli | 0x0000b0f4 | 0x0000b104 | This area contains the Ampli slow meters. |

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# SlowMeter Ampli

This area contains the Ampli slow meters.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000b0f4 (45300) | TempCh 1 | Float | 4 | R | Reads the TempCh |
| 0x0000b0f8 (45304) | TempCh 2 | Float | 4 | R | Reads the TempCh |
| 0x0000b0fc (45308) | TempCh 3 | Float | 4 | R | Reads the TempCh |
| 0x0000b100 (45312) | TempCh 4 | Float | 4 | R | Reads the TempCh |

# SlowMeter SourceSelection

This area contains the SourceSelection slow meters.

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| PilotToneDetectActual CH 1 | 0x0000b310 | 0x0000b320 | Reads the detected rms value of pilot Tone on CH 1 |
| PilotToneDetectActual CH 2 | 0x0000b320 | 0x0000b330 | Reads the detected rms value of pilot Tone on CH 2 |
| PilotToneDetectActual CH 3 | 0x0000b330 | 0x0000b340 | Reads the detected rms value of pilot Tone on CH 3 |
| PilotToneDetectActual CH 4 | 0x0000b340 | 0x0000b350 | Reads the detected rms value of pilot Tone on CH 4 |
| PilotToneDetectedActual CH 1 | 0x0000b350 | 0x0000b354 | Reads the validity of detected pilot Tone on CH 1 |
| PilotToneDetectedActual CH 2 | 0x0000b354 | 0x0000b358 | Reads the validity of detected pilot Tone on CH 2 |
| PilotToneDetectedActual CH 3 | 0x0000b358 | 0x0000b35c | Reads the validity of detected pilot Tone on CH 3 |
| PilotToneDetectedActual CH 4 | 0x0000b35c | 0x0000b360 | Reads the validity of detected pilot Tone on CH 4 |

# PilotToneDetectActual CH 1

Reads the detected rms value of pilot Tone on CH 1

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000b310 (45840) | PilotToneDetectActual CH 1 Source 1 | Float | 4 | R | Reads the detected rms value of pilot Tone on CH 1 of Source 1 |
| 0x0000b314 (45844) | PilotToneDetectActual CH 1 Source 2 | Float | 4 | R | Reads the detected rms value of pilot Tone on CH 1 of Source 2 |
| 0x0000b318 (45848) | PilotToneDetectActual CH 1 Source 3 | Float | 4 | R | Reads the detected rms value of pilot Tone on CH 1 of Source 3 |
| 0x0000b31c (45852) | PilotToneDetectActual CH 1 Source 4 | Float | 4 | R | Reads the detected rms value of pilot Tone on CH 1 of Source 4 |

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## PilotToneDetectActual CH 2

Reads the detected rms value of pilot Tone on CH 2

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000b320 (45856) | PilotToneDetectActual CH 2 Source 1 | Float | 4 | R | Reads the detected rms value of pilot Tone on CH 2 of Source 1 |
| 0x0000b324 (45860) | PilotToneDetectActual CH 2 Source 2 | Float | 4 | R | Reads the detected rms value of pilot Tone on CH 2 of Source 2 |
| 0x0000b328 (45864) | PilotToneDetectActual CH 2 Source 3 | Float | 4 | R | Reads the detected rms value of pilot Tone on CH 2 of Source 3 |
| 0x0000b32c (45868) | PilotToneDetectActual CH 2 Source 4 | Float | 4 | R | Reads the detected rms value of pilot Tone on CH 2 of Source 4 |

## PilotToneDetectActual CH 3

Reads the detected rms value of pilot Tone on CH 3

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000b330 (45872) | PilotToneDetectActual CH 3 Source 1 | Float | 4 | R | Reads the detected rms value of pilot Tone on CH 3 of Source 1 |
| 0x0000b334 (45876) | PilotToneDetectActual CH 3 Source 2 | Float | 4 | R | Reads the detected rms value of pilot Tone on CH 3 of Source 2 |
| 0x0000b338 (45880) | PilotToneDetectActual CH 3 Source 3 | Float | 4 | R | Reads the detected rms value of pilot Tone on CH 3 of Source 3 |
| 0x0000b33c (45884) | PilotToneDetectActual CH 3 Source 4 | Float | 4 | R | Reads the detected rms value of pilot Tone on CH 3 of Source 4 |

## PilotToneDetectActual CH 4

Reads the detected rms value of pilot Tone on CH 4

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000b340 (45888) | PilotToneDetectActual CH 4 Source 1 | Float | 4 | R | Reads the detected rms value of pilot Tone on CH 4 of Source 1 |
| 0x0000b344 (45892) | PilotToneDetectActual CH 4 Source 2 | Float | 4 | R | Reads the detected rms value of pilot Tone on CH 4 of Source 2 |
| 0x0000b348 (45896) | PilotToneDetectActual CH 4 Source 3 | Float | 4 | R | Reads the detected rms value of pilot Tone on CH 4 of Source 3 |
| 0x0000b34c (45900) | PilotToneDetectActual CH 4 Source 4 | Float | 4 | R | Reads the detected rms value of pilot Tone on CH 4 of Source 4 |

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## PilotToneDetectedActual CH 1

Reads the validity of detected pilot Tone on CH 1

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000b350 (45904) | PilotToneDetectedActual CH 1 Source 1 | uint8 | 1 | R | Reads the validity of detected pilot Tone on CH 1 |
| 0x0000b351 (45905) | PilotToneDetectedActual CH 1 Source 2 | uint8 | 1 | R | Reads the validity of detected pilot Tone on CH 2 |
| 0x0000b352 (45906) | PilotToneDetectedActual CH 1 Source 3 | uint8 | 1 | R | Reads the validity of detected pilot Tone on CH 3 |
| 0x0000b353 (45907) | PilotToneDetectedActual CH 1 Source 4 | uint8 | 1 | R | Reads the validity of detected pilot Tone on CH 4 |

## PilotToneDetectedActual CH 2

Reads the validity of detected pilot Tone on CH 2

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000b354 (45908) | PilotToneDetectedActual CH 2 Source 1 | uint8 | 1 | R | Reads the validity of detected pilot Tone on CH 1 |
| 0x0000b355 (45909) | PilotToneDetectedActual CH 2 Source 2 | uint8 | 1 | R | Reads the validity of detected pilot Tone on CH 2 |
| 0x0000b356 (45910) | PilotToneDetectedActual CH 2 Source 3 | uint8 | 1 | R | Reads the validity of detected pilot Tone on CH 3 |
| 0x0000b357 (45911) | PilotToneDetectedActual CH 2 Source 4 | uint8 | 1 | R | Reads the validity of detected pilot Tone on CH 4 |

## PilotToneDetectedActual CH 3

Reads the validity of detected pilot Tone on CH 3

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000b358 (45912) | PilotToneDetectedActual CH 3 Source 1 | uint8 | 1 | R | Reads the validity of detected pilot Tone on CH 1 |
| 0x0000b359 (45913) | PilotToneDetectedActual CH 3 Source 2 | uint8 | 1 | R | Reads the validity of detected pilot Tone on CH 2 |
| 0x0000b35a (45914) | PilotToneDetectedActual CH 3 Source 3 | uint8 | 1 | R | Reads the validity of detected pilot Tone on CH 3 |
| 0x0000b35b (45915) | PilotToneDetectedActual CH 3 Source 4 | uint8 | 1 | R | Reads the validity of detected pilot Tone on CH 4 |

# PilotToneDetectedActual CH 4

Reads the validity of detected pilot Tone on CH 4

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000b35c (45916) | PilotToneDetectedActual CH 4 Source 1 | uint8 | 1 | R | Reads the validity of detected pilot Tone on CH 1 |
| 0x0000b35d (45917) | PilotToneDetectedActual CH 4 Source 2 | uint8 | 1 | R | Reads the validity of detected pilot Tone on CH 2 |
| 0x0000b35e (45918) | PilotToneDetectedActual CH 4 Source 3 | uint8 | 1 | R | Reads the validity of detected pilot Tone on CH 3 |
| 0x0000b35f (45919) | PilotToneDetectedActual CH 4 Source 4 | uint8 | 1 | R | Reads the validity of detected pilot Tone on CH 4 |

# SlowMeter Ways

This area contains the Ways slow meters.

| BlockId | Start Address | End Address | Description |
|---------|---------------|-------------|-------------|
| PilotToneDetection Ways | 0x0000b478 | 0x0000b488 | Reads the detected rms value of pilot Tone |
| PilotToneDetectionImpedance Ways | 0x0000b488 | 0x0000b498 | Reads the detected impedance value with pilot Tone |
| PilotToneDetectedRms Ways | 0x0000b4a8 | 0x0000b4ac | Reads if the detected voltage value is inside specified range |
| PilotToneDetectedImpedance Ways | 0x0000b4ac | 0x0000b4b0 | Reads if the detected impedance value is inside specified range |
| PilotToneDetectionRmsIsValid Ways | 0x0000b4b4 | 0x0000b4b8 | Reads the validity of voltage detected with pilot Tone |
| PilotToneDetectionImpedanceRmsIsValid Ways | 0x0000b4b8 | 0x0000b4c8 | Reads the validity of impedance detected with pilot Tone |

# PilotToneDetection Ways

Reads the detected rms value of pilot Tone

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000b478 (46200) | PilotToneDetection Ways CH 1 | Float | 4 | R | Reads the detected rms value of pilot Tone on CH 1 |
| 0x0000b47c (46204) | PilotToneDetection Ways CH 2 | Float | 4 | R | Reads the detected rms value of pilot Tone on CH 2 |
| 0x0000b480 (46208) | PilotToneDetection Ways CH 3 | Float | 4 | R | Reads the detected rms value of pilot Tone on CH 3 |
| 0x0000b484 (46212) | PilotToneDetection Ways CH 4 | Float | 4 | R | Reads the detected rms value of pilot Tone on CH 4 |

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# PilotToneDetectionImpedance Ways

Reads the detected impedance value with pilot Tone

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000b488 (46216) | PilotToneDetectionImpedance Ways CH 1 | Float | 4 | R | Reads the detected impedance value with pilot Tone on CH 1 |
| 0x0000b48c (46220) | PilotToneDetectionImpedance Ways CH 2 | Float | 4 | R | Reads the detected impedance value with pilot Tone on CH 2 |
| 0x0000b490 (46224) | PilotToneDetectionImpedance Ways CH 3 | Float | 4 | R | Reads the detected impedance value with pilot Tone on CH 3 |
| 0x0000b494 (46228) | PilotToneDetectionImpedance Ways CH 4 | Float | 4 | R | Reads the detected impedance value with pilot Tone on CH 4 |

# PilotToneDetectedRms Ways

Reads if the detected voltage value is inside specified range

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000b4a8 (46248) | PilotToneDetectedRms Ways CH 1 | uint8 | 1 | R | Reads if the detected voltage value is inside specified range on CH 1. If so data is 1 else 0. |
| 0x0000b4a9 (46249) | PilotToneDetectedRms Ways CH 2 | uint8 | 1 | R | Reads if the detected voltage value is inside specified range on CH 2. If so data is 1 else 0. |
| 0x0000b4aa (46250) | PilotToneDetectedRms Ways CH 3 | uint8 | 1 | R | Reads if the detected voltage value is inside specified range on CH 3. If so data is 1 else 0. |
| 0x0000b4ab (46251) | PilotToneDetectedRms Ways CH 4 | uint8 | 1 | R | Reads if the detected voltage value is inside specified range on CH 4. If so data is 1 else 0. |

# PilotToneDetectedImpedance Ways

Reads if the detected impedance value is inside specified range

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000b4ac (46252) | PilotToneDetectedImpedance Ways CH 1 | uint8 | 1 | R | Reads if the detected impedance value is inside specified range on CH 1. If so data is 1 else 0. |
| 0x0000b4ad (46253) | PilotToneDetectedImpedance Ways CH 2 | uint8 | 1 | R | Reads if the detected impedance value is inside specified range on CH 2. If so data is 1 else 0. |
| 0x0000b4ae (46254) | PilotToneDetectedImpedance Ways CH 3 | uint8 | 1 | R | Reads if the detected impedance value is inside specified range on CH 3. If so data is 1 else 0. |
| 0x0000b4af (46255) | PilotToneDetectedImpedance Ways CH 4 | uint8 | 1 | R | Reads if the detected impedance value is inside specified range on CH 4. If so data is 1 else 0. |

# PilotToneDetectionRmsIsValid Ways

Reads the validity of voltage detected with pilot Tone

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000b4b4 (46260) | PilotToneDetectionRmsIsValid Ways CH 1 | uint8 | 1 | R | Reads the validity of voltage detected with pilot Tone on CH 1. If readings is valid data is 1 else 0. |
| 0x0000b4b5 (46261) | PilotToneDetectionRmsIsValid Ways CH 2 | uint8 | 1 | R | Reads the validity of voltage detected with pilot Tone on CH 2. If readings is valid data is 1 else 0. |
| 0x0000b4b6 (46262) | PilotToneDetectionRmsIsValid Ways CH 3 | uint8 | 1 | R | Reads the validity of voltage detected with pilot Tone on CH 3. If readings is valid data is 1 else 0. |
| 0x0000b4b7 (46263) | PilotToneDetectionRmsIsValid Ways CH 4 | uint8 | 1 | R | Reads the validity of voltage detected with pilot Tone on CH 4. If readings is valid data is 1 else 0. |

# PilotToneDetectionImpedanceRmsIsValid Ways

Reads the validity of impedance detected with pilot Tone

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000b4b8 (46264) | PilotToneDetectionImpedanceRmsIsValid Ways CH 1 | uint32 | 4 | R | Reads the validity of impedance detected with pilot Tone on CH 1. If readings is valid data is 1 else 0. |
| 0x0000b4bc (46268) | PilotToneDetectionImpedanceRmsIsValid Ways CH 2 | uint32 | 4 | R | Reads the validity of impedance detected with pilot Tone on CH 2. If readings is valid data is 1 else 0. |
| 0x0000b4c0 (46272) | PilotToneDetectionImpedanceRmsIsValid Ways CH 3 | uint32 | 4 | R | Reads the validity of impedance detected with pilot Tone on CH 3. If readings is valid data is 1 else 0. |
| 0x0000b4c4 (46276) | PilotToneDetectionImpedanceRmsIsValid Ways CH 4 | uint32 | 4 | R | Reads the validity of impedance detected with pilot Tone on CH 4. If readings is valid data is 1 else 0. |

# SlowMeter PreWays

This area contains the PreWays slow meters.

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| SlowMeter ExternalGain | 0x0000b5e8 | 0x0000b5f8 | This area contains the PreWays ExternalGain. |
| SlowMeter GPI scaled value | 0x0000b5f8 | 0x0000b608 | This area contains the GPI scaled value. |

# SlowMeter ExternalGain

This area contains the PreWays ExternalGain.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000b5e8 (46568) | SlowMeter PreWays CH 1 | Float | 4 | R | Reads the ExternalGain for channel 1 |
| 0x0000b5ec (46572) | SlowMeter PreWays CH 2 | Float | 4 | R | Reads the ExternalGain for channel 2 |
| 0x0000b5f0 (46576) | SlowMeter PreWays CH 3 | Float | 4 | R | Reads the ExternalGain for channel 3 |
| 0x0000b5f4 (46580) | SlowMeter PreWays CH 4 | Float | 4 | R | Reads the ExternalGain for channel 4 |

# SlowMeter GPI scaled value

This area contains the GPI scaled value.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000b5f8 (46584) | SlowMeter GPI scaled value CH 1 | Float | 4 | R | Reads the GPI scaled value for channel 1 |
| 0x0000b5fc (46588) | SlowMeter GPI scaled value CH 2 | Float | 4 | R | Reads the GPI scaled value for channel 2 |
| 0x0000b600 (46592) | SlowMeter GPI scaled value CH 3 | Float | 4 | R | Reads the GPI scaled value for channel 3 |
| 0x0000b604 (46596) | SlowMeter GPI scaled value CH 4 | Float | 4 | R | Reads the GPI scaled value for channel 4 |

# SlowMeter Standby State

This area contains the Standby State slow meters.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000b638 (46648) | Standby Active | uint32 | 4 | R | If 1 the Standby is active, else 0. |

# SlowMeter ChannelAlarmStatuses

This area contains the ChannelAlarmStatuses slow meters.

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| SoaThermal Channel Alarm Statuses | 0x0000b640 | 0x0000b644 | Reads the SoaThermal Alarm |
| Temp Channel Alarm Statuses | 0x0000b644 | 0x0000b648 | Reads the Temp Alarm |
| VRail Channel Alarm Statuses | 0x0000b648 | 0x0000b64c | Reads the VRail Alarm |

# SoaThermal Channel Alarm Statuses

Reads the SoaThermal Alarm

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000b640 (46656) | SoaThermal CH 1 | uint8 | 1 | R | Reads the SoaThermal Alarm for CH 1 |
| 0x0000b641 (46657) | SoaThermal CH 2 | uint8 | 1 | R | Reads the SoaThermal Alarm for CH 2 |
| 0x0000b642 (46658) | SoaThermal CH 3 | uint8 | 1 | R | Reads the SoaThermal Alarm for CH 3 |
| 0x0000b643 (46659) | SoaThermal CH 4 | uint8 | 1 | R | Reads the SoaThermal Alarm for CH 4 |

# Temp Channel Alarm Statuses

Reads the Temp Alarm

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000b644 (46660) | Temp CH 1 | uint8 | 1 | R | Reads the Temp Alarm for CH 1 |
| 0x0000b645 (46661) | Temp CH 2 | uint8 | 1 | R | Reads the Temp Alarm for CH 2 |
| 0x0000b646 (46662) | Temp CH 3 | uint8 | 1 | R | Reads the Temp Alarm for CH 3 |
| 0x0000b647 (46663) | Temp CH 4 | uint8 | 1 | R | Reads the Temp Alarm for CH 4 |

# VRail Channel Alarm Statuses

Reads the VRail Alarm

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000b648 (46664) | VRail CH 1 | uint8 | 1 | R | Reads the VRail Alarm for CH 1 |
| 0x0000b649 (46665) | VRail CH 2 | uint8 | 1 | R | Reads the VRail Alarm for CH 2 |
| 0x0000b64a (46666) | VRail CH 3 | uint8 | 1 | R | Reads the VRail Alarm for CH 3 |
| 0x0000b64b (46667) | VRail CH 4 | uint8 | 1 | R | Reads the VRail Alarm for CH 4 |

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# SlowMeter AlarmStatus

This area contains the AlarmStatus slow meters.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000b650 (46672) | Fan | uint8 | 1 | R | Reads the Fan |
| 0x0000b651 (46673) | HighOverTemperature | uint8 | 1 | R | Reads 1 when temperature of the amplifier overcomes 95 C°, else 0. |
| 0x0000b653 (46675) | PsTempAlarmStatus | uint8 | 1 | R | Reads the PsTempAlarmStatus |
| 0x0000b654 (46676) | VAuxAlarmStatus | uint8 | 1 | R | Reads the VAuxAlarmStatus |
| 0x0000b655 (46677) | GenericFault | uint8 | 1 | R | Generic Fault |
| 0x0000b656 (46678) | FaultCode | uint8 | 1 | R | Code to identify any active fault. (see table below) |
| 0x0000b657 (46679) | GPO relay State | uint8 | 1 | R | Describes the actual state of relay: if 1 it is closed, if 0 it is open. |
| 0x0000b658 (46680) | Fault Code Flags | uint32 | 4 | R | Bitwise description of all active faults. Bit position follow the codes of FaultCode starting from LSB. |

FaultCode codes:

| code | fault |
|---|---|
| 00 | No Fault |
| 01 | HWGoodT |
| 02 | PGoodPOn |
| 03 | CtrlVer |
| 04 | RailsPOn |
| 05 | RailsOverV |
| 06 | RailsUnderV |
| 07 | OutDC |
| 08 | Fan Broken |
| 09 | Fan Short |
| 10 | Fan Stuck |
| 11 | Software |
| 12 | MainBoardVer |
| 13 | PGoodMon |
| 14 | FuseBlown |
| 15 | PsuTemp |
| 16 | HiFreq |
| 17 | Model |
| 18 | OverCurrPOn |

# SlowMeter MuteCodes

This area contains the mute codes slow meters.

| BlockId | Start Address | End Address | Description |
|---------|---------------|-------------|-------------|
| Mute Codes Flags | 0x0000b700 | 0x0000b710 | Bitwise description of all active mutes. Bit position starts from LSB following the codes on mute code table. |

| code | fault |
|------|-------|
| 00 | Reserved |
| 01 | Reserved |
| 02 | Reserved |
| 03 | Positive Rail out of range |
| 04 | Negative Rails out of range |
| 05 | Short Circuit |
| 06 | Reserved |
| 07 | Reserved |
| 08 | Over Temperature |
| 09 | High Frequency |
| 10 | Reserved |
| 11 | Reserved |
| 12 | Reserved |
| 13 | Reserved |
| 14 | Mains Under Voltage |
| 15 | Mains Over Voltage |
| 16 | Reserved |
| 17 | Reserved |
| 18 | Reserved |

# Mute Codes Flags

Bitwise description of all active mutes. Bit position starts from LSB following the codes on mute code table.

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000b700 (46848) | Mute Code Flags CH 1 | uint32 | 4 | R | If a mute is active the bit in the position of the corresponding code is set to 1 |
| 0x0000b704 (46852) | Mute Code Flags CH 2 | uint32 | 4 | R | If a mute is active the bit in the position of the corresponding code is set to 1 |
| 0x0000b708 (46856) | Mute Code Flags CH 3 | uint32 | 4 | R | If a mute is active the bit in the position of the corresponding code is set to 1 |
| 0x0000b70c (46860) | Mute Code Flags CH 4 | uint32 | 4 | R | If a mute is active the bit in the position of the corresponding code is set to 1 |

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# Fast Meters

This area contains the fast meters.

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| FastMeter SourceSelection | 0x0000b800 | 0x0000ba10 | This area contains the SourceSelection fast meters. |
| FastMeter InputMatrix | 0x0000ba40 | 0x0000ba60 | This area contains the InputMatrix fast meters. |
| FastMeter Ways | 0x0000bac0 | 0x0000bbb8 | This area contains the Ways fast meters. |
| FastMeter PowerSupply | 0x0000bbb8 | 0x0000bbc4 | This area contains the PowerSupply fast meters. |

# FastMeter SourceSelection

This area contains the SourceSelection fast meters.

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| FastMeter Source Selection Source 1 | 0x0000b800 | 0x0000b880 | This area contains the source selection fast meter for Source 1. |
| FastMeter Source Selection Source 2 | 0x0000b880 | 0x0000b900 | This area contains the source selection fast meter for Source 2. |
| FastMeter Source Selection Source 3 | 0x0000b900 | 0x0000b980 | This area contains the source selection fast meter for Source 3. |
| FastMeter Source Selection Source 4 | 0x0000b980 | 0x0000ba00 | This area contains the source selection fast meter for Source 4. |
| FastMeter SourceSelection Backup Settings | 0x0000ba00 | 0x0000ba10 | This area contains the Source Selection -> Backup Settings fast meters. |

# FastMeter Source Selection Source 1

This area contains the source selection fast meter for Source 1.

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| Source 1 Type | 0x0000b800 | 0x0000b808 | |
| Source 1 Channel | 0x0000b808 | 0x0000b810 | |
| Source 1 Peak | 0x0000b810 | 0x0000b820 | Reads the Source 1 Peak |
| Source 1 Rms | 0x0000b820 | 0x0000b830 | Reads the Source 1 Rms |
| Source 1 Presence | 0x0000b830 | 0x0000b840 | Reads the Source 1 Presence |
| Source 1 Clip | 0x0000b840 | 0x0000b850 | Reads the Source 1 Clip |
| Source 1 Spare 1 | 0x0000b850 | 0x0000b860 | Source 1 Spare 1 |
| Source 1 Spare 2 | 0x0000b860 | 0x0000b870 | Source 1 Spare 2 |
| Source 1 Spare 3 | 0x0000b870 | 0x0000b880 | Source 1 Spare 3 |

## Source 1 Type

Deprecated since version 1.1.0

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000b800 (47104) | Source 1 - Type - Channel 1 | uint16 | 2 | R | |
| 0x0000b802 (47106) | Source 1 - Type - Channel 2 | uint16 | 2 | R | |
| 0x0000b804 (47108) | Source 1 - Type - Channel 3 | uint16 | 2 | R | |
| 0x0000b806 (47110) | Source 1 - Type - Channel 4 | uint16 | 2 | R | |

## Source 1 Channel

Deprecated since version 1.1.0

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000b808 (47112) | Source 1 - Channel - Channel 1 | uint16 | 2 | R | |
| 0x0000b80a (47114) | Source 1 - Channel - Channel 2 | uint16 | 2 | R | |
| 0x0000b80c (47116) | Source 1 - Channel - Channel 3 | uint16 | 2 | R | |
| 0x0000b80e (47118) | Source 1 - Channel - Channel 4 | uint16 | 2 | R | |

## Source 1 Peak

Reads the Source 1 Peak

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000b810 (47120) | Source 1 - Peak - Channel 1 | Float | 4 | R | Reads the Source 1 - Peak for Channel 1. |
| 0x0000b814 (47124) | Source 1 - Peak - Channel 2 | Float | 4 | R | Reads the Source 1 - Peak for Channel 2. |
| 0x0000b818 (47128) | Source 1 - Peak - Channel 3 | Float | 4 | R | Reads the Source 1 - Peak for Channel 3. |
| 0x0000b81c (47132) | Source 1 - Peak - Channel 4 | Float | 4 | R | Reads the Source 1 - Peak for Channel 4. |

## Source 1 Rms

Reads the Source 1 Rms

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000b820 (47136) | Source 1 - Rms - Channel 1 | Float | 4 | R | Reads the Source 1 - Rms for Channel 1. |
| 0x0000b824 (47140) | Source 1 - Rms - Channel 2 | Float | 4 | R | Reads the Source 1 - Rms for Channel 2. |
| 0x0000b828 (47144) | Source 1 - Rms - Channel 3 | Float | 4 | R | Reads the Source 1 - Rms for Channel 3. |
| 0x0000b82c (47148) | Source 1 - Rms - Channel 4 | Float | 4 | R | Reads the Source 1 - Rms for Channel 4. |

## Source 1 Presence

Reads the Source 1 Presence

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000b830 (47152) | Source 1 - Presence - Channel 1 | uint32 | 4 | R | Reads the Source 1 - Presence for Channel 1. |
| 0x0000b834 (47156) | Source 1 - Presence - Channel 2 | uint32 | 4 | R | Reads the Source 1 - Presence for Channel 2. |
| 0x0000b838 (47160) | Source 1 - Presence - Channel 3 | uint32 | 4 | R | Reads the Source 1 - Presence for Channel 3. |
| 0x0000b83c (47164) | Source 1 - Presence - Channel 4 | uint32 | 4 | R | Reads the Source 1 - Presence for Channel 4. |

## Source 1 Clip

Reads the Source 1 Clip

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000b840 (47168) | Source 1 - Clip - Channel 1 | uint32 | 4 | R | Reads the Source 1 - Clip for Channel 1. |
| 0x0000b844 (47172) | Source 1 - Clip - Channel 2 | uint32 | 4 | R | Reads the Source 1 - Clip for Channel 2. |
| 0x0000b848 (47176) | Source 1 - Clip - Channel 3 | uint32 | 4 | R | Reads the Source 1 - Clip for Channel 3. |
| 0x0000b84c (47180) | Source 1 - Clip - Channel 4 | uint32 | 4 | R | Reads the Source 1 - Clip for Channel 4. |

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# Source 1 Spare 1

Source 1 Spare 1

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000b850 (47184) | Source 1 - Spare 1 - Channel 1 | uint32 | 4 | R | Reads the Source 1 - Spare 1 for Channel 1. |
| 0x0000b854 (47188) | Source 1 - Spare 1 - Channel 2 | uint32 | 4 | R | Reads the Source 1 - Spare 1 for Channel 2. |
| 0x0000b858 (47192) | Source 1 - Spare 1 - Channel 3 | uint32 | 4 | R | Reads the Source 1 - Spare 1 for Channel 3. |
| 0x0000b85c (47196) | Source 1 - Spare 1 - Channel 4 | uint32 | 4 | R | Reads the Source 1 - Spare 1 for Channel 4. |

# Source 1 Spare 2

Source 1 Spare 2

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000b860 (47200) | Source 1 - Spare 2 - Channel 1 | uint32 | 4 | R | Reads the Source 1 - Spare 2 for Channel 1. |
| 0x0000b864 (47204) | Source 1 - Spare 2 - Channel 2 | uint32 | 4 | R | Reads the Source 1 - Spare 2 for Channel 2. |
| 0x0000b868 (47208) | Source 1 - Spare 2 - Channel 3 | uint32 | 4 | R | Reads the Source 1 - Spare 2 for Channel 3. |
| 0x0000b86c (47212) | Source 1 - Spare 2 - Channel 4 | uint32 | 4 | R | Reads the Source 1 - Spare 2 for Channel 4. |

# Source 1 Spare 3

Source 1 Spare 3

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000b870 (47216) | Source 1 - Spare 3 - Channel 1 | uint32 | 4 | R | Reads the Source 1 - Spare 3 for Channel 1. |
| 0x0000b874 (47220) | Source 1 - Spare 3 - Channel 2 | uint32 | 4 | R | Reads the Source 1 - Spare 3 for Channel 2. |
| 0x0000b878 (47224) | Source 1 - Spare 3 - Channel 3 | uint32 | 4 | R | Reads the Source 1 - Spare 3 for Channel 3. |
| 0x0000b87c (47228) | Source 1 - Spare 3 - Channel 4 | uint32 | 4 | R | Reads the Source 1 - Spare 3 for Channel 4. |

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# FastMeter Source Selection Source 2

This area contains the source selection fast meter for Source 2.

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| Source 2 Type | 0x0000b880 | 0x0000b888 | |
| Source 2 Channel | 0x0000b888 | 0x0000b890 | |
| Source 2 Peak | 0x0000b890 | 0x0000b8a0 | Reads the Source 2 Peak |
| Source 2 Rms | 0x0000b8a0 | 0x0000b8b0 | Reads the Source 2 Rms |
| Source 2 Presence | 0x0000b8b0 | 0x0000b8c0 | Reads the Source 2 Presence |
| Source 2 Clip | 0x0000b8c0 | 0x0000b8d0 | Reads the Source 2 Clip |
| Source 2 Spare 1 | 0x0000b8d0 | 0x0000b8e0 | Source 2 Spare 1 |
| Source 2 Spare 2 | 0x0000b8e0 | 0x0000b8f0 | Source 2 Spare 2 |
| Source 2 Spare 3 | 0x0000b8f0 | 0x0000b900 | Source 2 Spare 3 |

## Source 2 Type

Deprecated since version 1.1.0

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000b880 (47232) | Source 2 - Type - Channel 1 | uint16 | 2 | R | |
| 0x0000b882 (47234) | Source 2 - Type - Channel 2 | uint16 | 2 | R | |
| 0x0000b884 (47236) | Source 2 - Type - Channel 3 | uint16 | 2 | R | |
| 0x0000b886 (47238) | Source 2 - Type - Channel 4 | uint16 | 2 | R | |

## Source 2 Channel

Deprecated since version 1.1.0

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000b888 (47240) | Source 2 - Channel - Channel 1 | uint16 | 2 | R | |
| 0x0000b88a (47242) | Source 2 - Channel - Channel 2 | uint16 | 2 | R | |
| 0x0000b88c (47244) | Source 2 - Channel - Channel 3 | uint16 | 2 | R | |
| 0x0000b88e (47246) | Source 2 - Channel - Channel 4 | uint16 | 2 | R | |

# Source 2 Peak

Reads the Source 2 Peak

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000b890 (47248) | Source 2 - Peak - Channel 1 | Float | 4 | R | Reads the Source 2 - Peak for Channel 1. |
| 0x0000b894 (47252) | Source 2 - Peak - Channel 2 | Float | 4 | R | Reads the Source 2 - Peak for Channel 2. |
| 0x0000b898 (47256) | Source 2 - Peak - Channel 3 | Float | 4 | R | Reads the Source 2 - Peak for Channel 3. |
| 0x0000b89c (47260) | Source 2 - Peak - Channel 4 | Float | 4 | R | Reads the Source 2 - Peak for Channel 4. |

# Source 2 Rms

Reads the Source 2 Rms

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000b8a0 (47264) | Source 2 - Rms - Channel 1 | Float | 4 | R | Reads the Source 2 - Rms for Channel 1. |
| 0x0000b8a4 (47268) | Source 2 - Rms - Channel 2 | Float | 4 | R | Reads the Source 2 - Rms for Channel 2. |
| 0x0000b8a8 (47272) | Source 2 - Rms - Channel 3 | Float | 4 | R | Reads the Source 2 - Rms for Channel 3. |
| 0x0000b8ac (47276) | Source 2 - Rms - Channel 4 | Float | 4 | R | Reads the Source 2 - Rms for Channel 4. |

# Source 2 Presence

Reads the Source 2 Presence

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000b8b0 (47280) | Source 2 - Presence - Channel 1 | uint32 | 4 | R | Reads the Source 2 - Presence for Channel 1. |
| 0x0000b8b4 (47284) | Source 2 - Presence - Channel 2 | uint32 | 4 | R | Reads the Source 2 - Presence for Channel 2. |
| 0x0000b8b8 (47288) | Source 2 - Presence - Channel 3 | uint32 | 4 | R | Reads the Source 2 - Presence for Channel 3. |
| 0x0000b8bc (47292) | Source 2 - Presence - Channel 4 | uint32 | 4 | R | Reads the Source 2 - Presence for Channel 4. |

# Source 2 Clip

Reads the Source 2 Clip

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000b8c0 (47296) | Source 2 - Clip - Channel 1 | uint32 | 4 | R | Reads the Source 2 - Clip for Channel 1. |
| 0x0000b8c4 (47300) | Source 2 - Clip - Channel 2 | uint32 | 4 | R | Reads the Source 2 - Clip for Channel 2. |
| 0x0000b8c8 (47304) | Source 2 - Clip - Channel 3 | uint32 | 4 | R | Reads the Source 2 - Clip for Channel 3. |
| 0x0000b8cc (47308) | Source 2 - Clip - Channel 4 | uint32 | 4 | R | Reads the Source 2 - Clip for Channel 4. |

# Source 2 Spare 1

Source 2 Spare 1

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000b8d0 (47312) | Source 2 - Spare 1 - Channel 1 | uint32 | 4 | R | Reads the Source 2 - Spare 1 for Channel 1. |
| 0x0000b8d4 (47316) | Source 2 - Spare 1 - Channel 2 | uint32 | 4 | R | Reads the Source 2 - Spare 1 for Channel 2. |
| 0x0000b8d8 (47320) | Source 2 - Spare 1 - Channel 3 | uint32 | 4 | R | Reads the Source 2 - Spare 1 for Channel 3. |
| 0x0000b8dc (47324) | Source 2 - Spare 1 - Channel 4 | uint32 | 4 | R | Reads the Source 2 - Spare 1 for Channel 4. |

# Source 2 Spare 2

Source 2 Spare 2

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000b8e0 (47328) | Source 2 - Spare 2 - Channel 1 | uint32 | 4 | R | Reads the Source 2 - Spare 2 for Channel 1. |
| 0x0000b8e4 (47332) | Source 2 - Spare 2 - Channel 2 | uint32 | 4 | R | Reads the Source 2 - Spare 2 for Channel 2. |
| 0x0000b8e8 (47336) | Source 2 - Spare 2 - Channel 3 | uint32 | 4 | R | Reads the Source 2 - Spare 2 for Channel 3. |
| 0x0000b8ec (47340) | Source 2 - Spare 2 - Channel 4 | uint32 | 4 | R | Reads the Source 2 - Spare 2 for Channel 4. |

# Source 2 Spare 3

Source 2 Spare 3

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000b8f0 (47344) | Source 2 - Spare 3 - Channel 1 | uint32 | 4 | R | Reads the Source 2 - Spare 3 for Channel 1. |
| 0x0000b8f4 (47348) | Source 2 - Spare 3 - Channel 2 | uint32 | 4 | R | Reads the Source 2 - Spare 3 for Channel 2. |
| 0x0000b8f8 (47352) | Source 2 - Spare 3 - Channel 3 | uint32 | 4 | R | Reads the Source 2 - Spare 3 for Channel 3. |
| 0x0000b8fc (47356) | Source 2 - Spare 3 - Channel 4 | uint32 | 4 | R | Reads the Source 2 - Spare 3 for Channel 4. |

# FastMeter Source Selection Source 3

This area contains the source selection fast meter for Source 3.

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| Source 3 Type | 0x0000b900 | 0x0000b908 | |
| Source 3 Channel | 0x0000b908 | 0x0000b910 | |
| Source 3 Peak | 0x0000b910 | 0x0000b920 | Reads the Source 3 Peak |
| Source 3 Rms | 0x0000b920 | 0x0000b930 | Reads the Source 3 Rms |
| Source 3 Presence | 0x0000b930 | 0x0000b940 | Reads the Source 3 Presence |
| Source 3 Clip | 0x0000b940 | 0x0000b950 | Reads the Source 3 Clip |
| Source 3 Spare 1 | 0x0000b950 | 0x0000b960 | Source 3 Spare 1 |
| Source 3 Spare 2 | 0x0000b960 | 0x0000b970 | Source 3 Spare 2 |
| Source 3 Spare 3 | 0x0000b970 | 0x0000b980 | Source 3 Spare 3 |

# ~~Source 3 Type~~

Deprecated since version 1.1.0

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| ~~0x0000b900 (47360)~~ | ~~Source 3 - Type - Channel 1~~ | ~~uint16~~ | ~~2~~ | ~~R~~ | |
| ~~0x0000b902 (47362)~~ | ~~Source 3 - Type - Channel 2~~ | ~~uint16~~ | ~~2~~ | ~~R~~ | |
| ~~0x0000b904 (47364)~~ | ~~Source 3 - Type - Channel 3~~ | ~~uint16~~ | ~~2~~ | ~~R~~ | |
| ~~0x0000b906 (47366)~~ | ~~Source 3 - Type - Channel 4~~ | ~~uint16~~ | ~~2~~ | ~~R~~ | |

## ~~Source 3 Channel~~

Deprecated since version 1.1.0

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| ~~0x0000b908~~ ~~(47368)~~ | ~~Source 3 - Channel - Channel 1~~ | ~~uint16~~ | ~~2~~ | ~~R~~ | |
| ~~0x0000b90a~~ ~~(47370)~~ | ~~Source 3 - Channel - Channel 2~~ | ~~uint16~~ | ~~2~~ | ~~R~~ | |
| ~~0x0000b90c~~ ~~(47372)~~ | ~~Source 3 - Channel - Channel 3~~ | ~~uint16~~ | ~~2~~ | ~~R~~ | |
| ~~0x0000b90e~~ ~~(47374)~~ | ~~Source 3 - Channel - Channel 4~~ | ~~uint16~~ | ~~2~~ | ~~R~~ | |

# Source 3 Peak

Reads the Source 3 Peak

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000b910 (47376) | Source 3 - Peak - Channel 1 | Float | 4 | R | Reads the Source 3 - Peak for Channel 1. |
| 0x0000b914 (47380) | Source 3 - Peak - Channel 2 | Float | 4 | R | Reads the Source 3 - Peak for Channel 2. |
| 0x0000b918 (47384) | Source 3 - Peak - Channel 3 | Float | 4 | R | Reads the Source 3 - Peak for Channel 3. |
| 0x0000b91c (47388) | Source 3 - Peak - Channel 4 | Float | 4 | R | Reads the Source 3 - Peak for Channel 4. |

# Source 3 Rms

Reads the Source 3 Rms

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000b920 (47392) | Source 3 - Rms - Channel 1 | Float | 4 | R | Reads the Source 3 - Rms for Channel 1. |
| 0x0000b924 (47396) | Source 3 - Rms - Channel 2 | Float | 4 | R | Reads the Source 3 - Rms for Channel 2. |
| 0x0000b928 (47400) | Source 3 - Rms - Channel 3 | Float | 4 | R | Reads the Source 3 - Rms for Channel 3. |
| 0x0000b92c (47404) | Source 3 - Rms - Channel 4 | Float | 4 | R | Reads the Source 3 - Rms for Channel 4. |

## Source 3 Presence

Reads the Source 3 Presence

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000b930 (47408) | Source 3 - Presence - Channel 1 | uint32 | 4 | R | Reads the Source 3 - Presence for Channel 1. |
| 0x0000b934 (47412) | Source 3 - Presence - Channel 2 | uint32 | 4 | R | Reads the Source 3 - Presence for Channel 2. |
| 0x0000b938 (47416) | Source 3 - Presence - Channel 3 | uint32 | 4 | R | Reads the Source 3 - Presence for Channel 3. |
| 0x0000b93c (47420) | Source 3 - Presence - Channel 4 | uint32 | 4 | R | Reads the Source 3 - Presence for Channel 4. |

## Source 3 Clip

Reads the Source 3 Clip

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000b940 (47424) | Source 3 - Clip - Channel 1 | uint32 | 4 | R | Reads the Source 3 - Clip for Channel 1. |
| 0x0000b944 (47428) | Source 3 - Clip - Channel 2 | uint32 | 4 | R | Reads the Source 3 - Clip for Channel 2. |
| 0x0000b948 (47432) | Source 3 - Clip - Channel 3 | uint32 | 4 | R | Reads the Source 3 - Clip for Channel 3. |
| 0x0000b94c (47436) | Source 3 - Clip - Channel 4 | uint32 | 4 | R | Reads the Source 3 - Clip for Channel 4. |

## Source 3 Spare 1

Source 3 Spare 1

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000b950 (47440) | Source 3 - Spare 1 - Channel 1 | uint32 | 4 | R | Reads the Source 3 - Spare 1 for Channel 1. |
| 0x0000b954 (47444) | Source 3 - Spare 1 - Channel 2 | uint32 | 4 | R | Reads the Source 3 - Spare 1 for Channel 2. |
| 0x0000b958 (47448) | Source 3 - Spare 1 - Channel 3 | uint32 | 4 | R | Reads the Source 3 - Spare 1 for Channel 3. |
| 0x0000b95c (47452) | Source 3 - Spare 1 - Channel 4 | uint32 | 4 | R | Reads the Source 3 - Spare 1 for Channel 4. |

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# Source 3 Spare 2

Source 3 Spare 2

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000b960 (47456) | Source 3 - Spare 2 - Channel 1 | uint32 | 4 | R | Reads the Source 3 - Spare 2 for Channel 1. |
| 0x0000b964 (47460) | Source 3 - Spare 2 - Channel 2 | uint32 | 4 | R | Reads the Source 3 - Spare 2 for Channel 2. |
| 0x0000b968 (47464) | Source 3 - Spare 2 - Channel 3 | uint32 | 4 | R | Reads the Source 3 - Spare 2 for Channel 3. |
| 0x0000b96c (47468) | Source 3 - Spare 2 - Channel 4 | uint32 | 4 | R | Reads the Source 3 - Spare 2 for Channel 4. |

# Source 3 Spare 3

Source 3 Spare 3

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000b970 (47472) | Source 3 - Spare 3 - Channel 1 | uint32 | 4 | R | Reads the Source 3 - Spare 3 for Channel 1. |
| 0x0000b974 (47476) | Source 3 - Spare 3 - Channel 2 | uint32 | 4 | R | Reads the Source 3 - Spare 3 for Channel 2. |
| 0x0000b978 (47480) | Source 3 - Spare 3 - Channel 3 | uint32 | 4 | R | Reads the Source 3 - Spare 3 for Channel 3. |
| 0x0000b97c (47484) | Source 3 - Spare 3 - Channel 4 | uint32 | 4 | R | Reads the Source 3 - Spare 3 for Channel 4. |

# FastMeter Source Selection Source 4

This area contains the source selection fast meter for Source 4.

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| Source 4 Type | 0x0000b980 | 0x0000b988 | |
| Source 4 Channel | 0x0000b988 | 0x0000b990 | |
| Source 4 Peak | 0x0000b990 | 0x0000b9a0 | Reads the Source 4 Peak |
| Source 4 Rms | 0x0000b9a0 | 0x0000b9b0 | Reads the Source 4 Rms |
| Source 4 Presence | 0x0000b9b0 | 0x0000b9c0 | Reads the Source 4 Presence |
| Source 4 Clip | 0x0000b9c0 | 0x0000b9d0 | Reads the Source 4 Clip |
| Source 4 Spare 1 | 0x0000b9d0 | 0x0000b9e0 | Source 4 Spare 1 |
| Source 4 Spare 2 | 0x0000b9e0 | 0x0000b9f0 | Source 4 Spare 2 |
| Source 4 Spare 3 | 0x0000b9f0 | 0x0000ba00 | Source 4 Spare 3 |

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## Source 4 Type

Deprecated since version 1.1.0

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000b980 (47488) | Source 4 - Type - Channel 1 | uint16 | 2 | R | |
| 0x0000b982 (47490) | Source 4 - Type - Channel 2 | uint16 | 2 | R | |
| 0x0000b984 (47492) | Source 4 - Type - Channel 3 | uint16 | 2 | R | |
| 0x0000b986 (47494) | Source 4 - Type - Channel 4 | uint16 | 2 | R | |

## Source 4 Channel

Deprecated since version 1.1.0

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000b988 (47496) | Source 4 - Channel - Channel 1 | uint16 | 2 | R | |
| 0x0000b98a (47498) | Source 4 - Channel - Channel 2 | uint16 | 2 | R | |
| 0x0000b98c (47500) | Source 4 - Channel - Channel 3 | uint16 | 2 | R | |
| 0x0000b98e (47502) | Source 4 - Channel - Channel 4 | uint16 | 2 | R | |

## Source 4 Peak

Reads the Source 4 Peak

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000b990 (47504) | Source 4 - Peak - Channel 1 | Float | 4 | R | Reads the Source 4 - Peak for Channel 1. |
| 0x0000b994 (47508) | Source 4 - Peak - Channel 2 | Float | 4 | R | Reads the Source 4 - Peak for Channel 2. |
| 0x0000b998 (47512) | Source 4 - Peak - Channel 3 | Float | 4 | R | Reads the Source 4 - Peak for Channel 3. |
| 0x0000b99c (47516) | Source 4 - Peak - Channel 4 | Float | 4 | R | Reads the Source 4 - Peak for Channel 4. |

# Source 4 Rms

Reads the Source 4 Rms

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000b9a0 (47520) | Source 4 - Rms - Channel 1 | Float | 4 | R | Reads the Source 4 - Rms for Channel 1. |
| 0x0000b9a4 (47524) | Source 4 - Rms - Channel 2 | Float | 4 | R | Reads the Source 4 - Rms for Channel 2. |
| 0x0000b9a8 (47528) | Source 4 - Rms - Channel 3 | Float | 4 | R | Reads the Source 4 - Rms for Channel 3. |
| 0x0000b9ac (47532) | Source 4 - Rms - Channel 4 | Float | 4 | R | Reads the Source 4 - Rms for Channel 4. |

# Source 4 Presence

Reads the Source 4 Presence

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000b9b0 (47536) | Source 4 - Presence - Channel 1 | uint32 | 4 | R | Reads the Source 4 - Presence for Channel 1. |
| 0x0000b9b4 (47540) | Source 4 - Presence - Channel 2 | uint32 | 4 | R | Reads the Source 4 - Presence for Channel 2. |
| 0x0000b9b8 (47544) | Source 4 - Presence - Channel 3 | uint32 | 4 | R | Reads the Source 4 - Presence for Channel 3. |
| 0x0000b9bc (47548) | Source 4 - Presence - Channel 4 | uint32 | 4 | R | Reads the Source 4 - Presence for Channel 4. |

# Source 4 Clip

Reads the Source 4 Clip

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000b9c0 (47552) | Source 4 - Clip - Channel 1 | uint32 | 4 | R | Reads the Source 4 - Clip for Channel 1. |
| 0x0000b9c4 (47556) | Source 4 - Clip - Channel 2 | uint32 | 4 | R | Reads the Source 4 - Clip for Channel 2. |
| 0x0000b9c8 (47560) | Source 4 - Clip - Channel 3 | uint32 | 4 | R | Reads the Source 4 - Clip for Channel 3. |
| 0x0000b9cc (47564) | Source 4 - Clip - Channel 4 | uint32 | 4 | R | Reads the Source 4 - Clip for Channel 4. |

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# Source 4 Spare 1

Source 4 Spare 1

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000b9d0 (47568) | Source 4 - Spare 1 - Channel 1 | uint32 | 4 | R | Reads the Source 4 - Spare 1 for Channel 1. |
| 0x0000b9d4 (47572) | Source 4 - Spare 1 - Channel 2 | uint32 | 4 | R | Reads the Source 4 - Spare 1 for Channel 2. |
| 0x0000b9d8 (47576) | Source 4 - Spare 1 - Channel 3 | uint32 | 4 | R | Reads the Source 4 - Spare 1 for Channel 3. |
| 0x0000b9dc (47580) | Source 4 - Spare 1 - Channel 4 | uint32 | 4 | R | Reads the Source 4 - Spare 1 for Channel 4. |

# Source 4 Spare 2

Source 4 Spare 2

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000b9e0 (47584) | Source 4 - Spare 2 - Channel 1 | uint32 | 4 | R | Reads the Source 4 - Spare 2 for Channel 1. |
| 0x0000b9e4 (47588) | Source 4 - Spare 2 - Channel 2 | uint32 | 4 | R | Reads the Source 4 - Spare 2 for Channel 2. |
| 0x0000b9e8 (47592) | Source 4 - Spare 2 - Channel 3 | uint32 | 4 | R | Reads the Source 4 - Spare 2 for Channel 3. |
| 0x0000b9ec (47596) | Source 4 - Spare 2 - Channel 4 | uint32 | 4 | R | Reads the Source 4 - Spare 2 for Channel 4. |

# Source 4 Spare 3

Source 4 Spare 3

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000b9f0 (47600) | Source 4 - Spare 3 - Channel 1 | uint32 | 4 | R | Reads the Source 4 - Spare 3 for Channel 1. |
| 0x0000b9f4 (47604) | Source 4 - Spare 3 - Channel 2 | uint32 | 4 | R | Reads the Source 4 - Spare 3 for Channel 2. |
| 0x0000b9f8 (47608) | Source 4 - Spare 3 - Channel 3 | uint32 | 4 | R | Reads the Source 4 - Spare 3 for Channel 3. |
| 0x0000b9fc (47612) | Source 4 - Spare 3 - Channel 4 | uint32 | 4 | R | Reads the Source 4 - Spare 3 for Channel 4. |

# FastMeter SourceSelection Backup Settings

This area contains the Source Selection -> Backup Settings fast meters.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000ba00 (47616) | SelectedBackup 1 | uint32 | 4 | R | Channel 1 - SelectedBackup |
| 0x0000ba04 (47620) | SelectedBackup 2 | uint32 | 4 | R | Channel 2 - SelectedBackup |
| 0x0000ba08 (47624) | SelectedBackup 3 | uint32 | 4 | R | Channel 3 - SelectedBackup |
| 0x0000ba0c (47628) | SelectedBackup 4 | uint32 | 4 | R | Channel 4 - SelectedBackup |

# FastMeter InputMatrix

This area contains the InputMatrix fast meters.

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| FastMeter Peak InputMatrix | 0x0000ba40 | 0x0000ba50 | This area contains the InputMatrix Peak fast meters. |
| FastMeter Rms InputMatrix | 0x0000ba50 | 0x0000ba60 | This area contains the InputMatrix Rmsfast meters. |

# FastMeter Peak InputMatrix

This area contains the InputMatrix Peak fast meters.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000ba40 (47680) | Peak InputMatrix 1 | Float | 4 | R | Reads the FastMeter InputMatrix 1 Peak |
| 0x0000ba44 (47684) | Peak InputMatrix 2 | Float | 4 | R | Reads the FastMeter InputMatrix 2 Peak |
| 0x0000ba48 (47688) | Peak InputMatrix 3 | Float | 4 | R | Reads the FastMeter InputMatrix 3 Peak |
| 0x0000ba4c (47692) | Peak InputMatrix 4 | Float | 4 | R | Reads the FastMeter InputMatrix 4 Peak |

# FastMeter Rms InputMatrix

This area contains the InputMatrix Rmsfast meters.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000ba50 (47696) | Rms InputMatrix 1 | Float | 4 | R | Reads the FastMeter InputMatrix 1 Rms |
| 0x0000ba54 (47700) | Rms InputMatrix 2 | Float | 4 | R | Reads the FastMeter InputMatrix 2 Rms |
| 0x0000ba58 (47704) | Rms InputMatrix 3 | Float | 4 | R | Reads the FastMeter InputMatrix 3 Rms |
| 0x0000ba5c (47708) | Rms InputMatrix 4 | Float | 4 | R | Reads the FastMeter InputMatrix 4 Rms |

# FastMeter Ways

This area contains the Ways fast meters.

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| FastMeter Ways VPeak | 0x0000bac0 | 0x0000bad0 | Reads the VPeak - Voltage |
| FastMeter Ways VRms | 0x0000bad0 | 0x0000bae0 | Reads the VRms - Voltage |
| FastMeter Ways IPeak | 0x0000bae0 | 0x0000baf0 | Reads the IPeak - Current |
| FastMeter Ways IRms | 0x0000baf0 | 0x0000bb00 | Reads the IRms - Current |
| FastMeter Ways SoaGainReductionThermalLimiter | 0x0000bb10 | 0x0000bb20 | Reads the SoaGainReductionThermalLimiter |
| FastMeter Ways SoaGainReductionVoltageHfLimiter | 0x0000bb20 | 0x0000bb30 | Reads the SoaGainReductionVoltageHfLimiter |
| FastMeter Ways SoaGainReductionCurrentLongLimiter | 0x0000bb30 | 0x0000bb40 | Reads the SoaGainReductionCurrentLongLimiter |
| FastMeter Ways SoaGainReductionCurrentShortLimiter | 0x0000bb40 | 0x0000bb50 | Reads the SoaGainReductionCurrentShortLimiter |
| FastMeter Ways SoaGainReductionPowerLimiter | 0x0000bb50 | 0x0000bb60 | Reads the SoaGainReductionPowerLimiter |
| FastMeter Ways UserGainReductionVoltageLimiterPeak | 0x0000bb60 | 0x0000bb70 | Reads the UserGainReductionVoltageLimiterPeak |
| FastMeter Ways UserGainReductionVoltageLimiterRms | 0x0000bb70 | 0x0000bb80 | Reads the UserGainReductionVoltageLimiterRms |
| FastMeter Ways UserGainReductionClipLimiter | 0x0000bb80 | 0x0000bb90 | Reads the UserGainReductionClipLimiter |
| FastMeter Ways UserGainReductionTotal | 0x0000bb90 | 0x0000bba0 | Reads the UserGainReductionTotal |
| FastMeter Ways SignalPresence | 0x0000bba0 | 0x0000bba4 | Reads the SignalPresence |
| FastMeter Ways Headroom | 0x0000bba8 | 0x0000bbb8 | Reads the Headroom |

# FastMeter Ways VPeak

Reads the VPeak - Voltage

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000bac0 (47808) | VPeak CH 1 | Float | 4 | R | Reads the VPeak - Voltage for Channel 1 - Voltage |
| 0x0000bac4 (47812) | VPeak CH 2 | Float | 4 | R | Reads the VPeak - Voltage for Channel 2 - Voltage |
| 0x0000bac8 (47816) | VPeak CH 3 | Float | 4 | R | Reads the VPeak - Voltage for Channel 3 - Voltage |
| 0x0000bacc (47820) | VPeak CH 4 | Float | 4 | R | Reads the VPeak - Voltage for Channel 4 - Voltage |

# FastMeter Ways VRms

Reads the VRms - Voltage

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000bad0 (47824) | VRms CH 1 | Float | 4 | R | Reads the VRms for Channel 1 - Voltage |
| 0x0000bad4 (47828) | VRms CH 2 | Float | 4 | R | Reads the VRms for Channel 2 - Voltage |
| 0x0000bad8 (47832) | VRms CH 3 | Float | 4 | R | Reads the VRms for Channel 3 - Voltage |
| 0x0000badc (47836) | VRms CH 4 | Float | 4 | R | Reads the VRms for Channel 4 - Voltage |

# FastMeter Ways IPeak

Reads the IPeak - Current

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000bae0 (47840) | IPeak CH 1 | Float | 4 | R | Reads the IPeak for Channel 1 - Current |
| 0x0000bae4 (47844) | IPeak CH 2 | Float | 4 | R | Reads the IPeak for Channel 2 - Current |
| 0x0000bae8 (47848) | IPeak CH 3 | Float | 4 | R | Reads the IPeak for Channel 3 - Current |
| 0x0000baec (47852) | IPeak CH 4 | Float | 4 | R | Reads the IPeak for Channel 4 - Current |

# FastMeter Ways IRms

Reads the IRms - Current

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000baf0 (47856) | IRms CH 1 | Float | 4 | R | Reads the IRms for Channel 1 - Current |
| 0x0000baf4 (47860) | IRms CH 2 | Float | 4 | R | Reads the IRms for Channel 2 - Current |
| 0x0000baf8 (47864) | IRms CH 3 | Float | 4 | R | Reads the IRms for Channel 3 - Current |
| 0x0000bafc (47868) | IRms CH 4 | Float | 4 | R | Reads the IRms for Channel 4 - Current |

# FastMeter Ways SoaGainReductionThermalLimiter

Reads the SoaGainReductionThermalLimiter

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000bb10 (47888) | SoaGainReductionThermalLimiter CH 1 | Float | 4 | R | Reads the SoaGainReductionThermalLimiter for Channel 1 |
| 0x0000bb14 (47892) | SoaGainReductionThermalLimiter CH 2 | Float | 4 | R | Reads the SoaGainReductionThermalLimiter for Channel 2 |
| 0x0000bb18 (47896) | SoaGainReductionThermalLimiter CH 3 | Float | 4 | R | Reads the SoaGainReductionThermalLimiter for Channel 3 |
| 0x0000bb1c (47900) | SoaGainReductionThermalLimiter CH 4 | Float | 4 | R | Reads the SoaGainReductionThermalLimiter for Channel 4 |

# FastMeter Ways SoaGainReductionVoltageHfLimiter

Reads the SoaGainReductionVoltageHfLimiter

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000bb20 (47904) | SoaGainReductionVoltageHfLimiter CH 1 | Float | 4 | R | Reads the SoaGainReductionVoltageHfLimiter for Channel 1 |
| 0x0000bb24 (47908) | SoaGainReductionVoltageHfLimiter CH 2 | Float | 4 | R | Reads the SoaGainReductionVoltageHfLimiter for Channel 2 |
| 0x0000bb28 (47912) | SoaGainReductionVoltageHfLimiter CH 3 | Float | 4 | R | Reads the SoaGainReductionVoltageHfLimiter for Channel 3 |
| 0x0000bb2c (47916) | SoaGainReductionVoltageHfLimiter CH 4 | Float | 4 | R | Reads the SoaGainReductionVoltageHfLimiter for Channel 4 |

# FastMeter Ways SoaGainReductionCurrentLongLimiter

Reads the SoaGainReductionCurrentLongLimiter

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000bb30 (47920) | SoaGainReductionCurrentLongLimiter CH 1 | Float | 4 | R | Reads the SoaGainReductionCurrentLongLimiter for Channel 1 |
| 0x0000bb34 (47924) | SoaGainReductionCurrentLongLimiter CH 2 | Float | 4 | R | Reads the SoaGainReductionCurrentLongLimiter for Channel 2 |
| 0x0000bb38 (47928) | SoaGainReductionCurrentLongLimiter CH 3 | Float | 4 | R | Reads the SoaGainReductionCurrentLongLimiter for Channel 3 |
| 0x0000bb3c (47932) | SoaGainReductionCurrentLongLimiter CH 4 | Float | 4 | R | Reads the SoaGainReductionCurrentLongLimiter for Channel 4 |

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# FastMeter Ways SoaGainReductionCurrentShortLimiter

Reads the SoaGainReductionCurrentShortLimiter

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000bb40 (47936) | SoaGainReductionCurrentShortLimiter CH 1 | Float | 4 | R | Reads the SoaGainReductionCurrentShortLimiter for Channel 1 |
| 0x0000bb44 (47940) | SoaGainReductionCurrentShortLimiter CH 2 | Float | 4 | R | Reads the SoaGainReductionCurrentShortLimiter for Channel 2 |
| 0x0000bb48 (47944) | SoaGainReductionCurrentShortLimiter CH 3 | Float | 4 | R | Reads the SoaGainReductionCurrentShortLimiter for Channel 3 |
| 0x0000bb4c (47948) | SoaGainReductionCurrentShortLimiter CH 4 | Float | 4 | R | Reads the SoaGainReductionCurrentShortLimiter for Channel 4 |

# FastMeter Ways SoaGainReductionPowerLimiter

Reads the SoaGainReductionPowerLimiter

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000bb50 (47952) | SoaGainReductionPowerLimiter CH 1 | Float | 4 | R | Reads the SoaGainReductionPowerLimiter for Channel 1 |
| 0x0000bb54 (47956) | SoaGainReductionPowerLimiter CH 2 | Float | 4 | R | Reads the SoaGainReductionPowerLimiter for Channel 2 |
| 0x0000bb58 (47960) | SoaGainReductionPowerLimiter CH 3 | Float | 4 | R | Reads the SoaGainReductionPowerLimiter for Channel 3 |
| 0x0000bb5c (47964) | SoaGainReductionPowerLimiter CH 4 | Float | 4 | R | Reads the SoaGainReductionPowerLimiter for Channel 4 |

# FastMeter Ways UserGainReductionVoltageLimiterPeak

Reads the UserGainReductionVoltageLimiterPeak

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000bb60 (47968) | UserGainReductionVoltageLimiterPeak CH 1 | Float | 4 | R | Reads the UserGainReductionVoltageLimiterPeak for Channel 1 |
| 0x0000bb64 (47972) | UserGainReductionVoltageLimiterPeak CH 2 | Float | 4 | R | Reads the UserGainReductionVoltageLimiterPeak for Channel 2 |
| 0x0000bb68 (47976) | UserGainReductionVoltageLimiterPeak CH 3 | Float | 4 | R | Reads the UserGainReductionVoltageLimiterPeak for Channel 3 |
| 0x0000bb6c (47980) | UserGainReductionVoltageLimiterPeak CH 4 | Float | 4 | R | Reads the UserGainReductionVoltageLimiterPeak for Channel 4 |

# FastMeter Ways UserGainReductionVoltageLimiterRms

Reads the UserGainReductionVoltageLimiterRms

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000bb70 (47984) | UserGainReductionVoltageLimiterRms CH 1 | Float | 4 | R | Reads the UserGainReductionVoltageLimiterRms for Channel 1 |
| 0x0000bb74 (47988) | UserGainReductionVoltageLimiterRms CH 2 | Float | 4 | R | Reads the UserGainReductionVoltageLimiterRms for Channel 2 |
| 0x0000bb78 (47992) | UserGainReductionVoltageLimiterRms CH 3 | Float | 4 | R | Reads the UserGainReductionVoltageLimiterRms for Channel 3 |
| 0x0000bb7c (47996) | UserGainReductionVoltageLimiterRms CH 4 | Float | 4 | R | Reads the UserGainReductionVoltageLimiterRms for Channel 4 |

# FastMeter Ways UserGainReductionClipLimiter

Reads the UserGainReductionClipLimiter

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000bb80 (48000) | UserGainReductionClipLimiter CH 1 | Float | 4 | R | Reads the UserGainReductionClipLimiter for Channel 1 |
| 0x0000bb84 (48004) | UserGainReductionClipLimiter CH 2 | Float | 4 | R | Reads the UserGainReductionClipLimiter for Channel 2 |
| 0x0000bb88 (48008) | UserGainReductionClipLimiter CH 3 | Float | 4 | R | Reads the UserGainReductionClipLimiter for Channel 3 |
| 0x0000bb8c (48012) | UserGainReductionClipLimiter CH 4 | Float | 4 | R | Reads the UserGainReductionClipLimiter for Channel 4 |

# FastMeter Ways UserGainReductionTotal

Reads the UserGainReductionTotal

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000bb90 (48016) | UserGainReductionTotal CH 1 | Float | 4 | R | Reads the UserGainReductionTotal for Channel 1 |
| 0x0000bb94 (48020) | UserGainReductionTotal CH 2 | Float | 4 | R | Reads the UserGainReductionTotal for Channel 2 |
| 0x0000bb98 (48024) | UserGainReductionTotal CH 3 | Float | 4 | R | Reads the UserGainReductionTotal for Channel 3 |
| 0x0000bb9c (48028) | UserGainReductionTotal CH 4 | Float | 4 | R | Reads the UserGainReductionTotal for Channel 4 |

# FastMeter Ways SignalPresence

Reads the SignalPresence

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000bba0 (48032) | SignalPresence CH 1 | uint8 | 1 | R | Reads the SignalPresence for Channel 1 |
| 0x0000bba1 (48033) | SignalPresence CH 2 | uint8 | 1 | R | Reads the SignalPresence for Channel 2 |
| 0x0000bba2 (48034) | SignalPresence CH 3 | uint8 | 1 | R | Reads the SignalPresence for Channel 3 |
| 0x0000bba3 (48035) | SignalPresence CH 4 | uint8 | 1 | R | Reads the SignalPresence for Channel 4 |

# FastMeter Ways Headroom

Reads the Headroom

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000bba8 (48040) | Headroom CH 1 | Float | 4 | R | Reads the Headroom for Channel 1 |
| 0x0000bbac (48044) | Headroom CH 2 | Float | 4 | R | Reads the Headroom for Channel 2 |
| 0x0000bbb0 (48048) | Headroom CH 3 | Float | 4 | R | Reads the Headroom for Channel 3 |
| 0x0000bbb4 (48052) | Headroom CH 4 | Float | 4 | R | Reads the Headroom for Channel 4 |

# FastMeter PowerSupply

This area contains the PowerSupply fast meters.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000bbb8 (48056) | SoaGainReductionPowerLimiter | Float | 4 | R | Reads the SoaGainReductionPowerLimiter |
| 0x0000bbbc (48060) | SoaGainReductionTempTrLimiter | Float | 4 | R | Reads the SoaGainReductionTempTrLimiter |
| 0x0000bbc0 (48064) | SoaGainReductionTempHSLimiter | Float | 4 | R | Reads the SoaGainReductionTempHSLimiter Heat Sink |

# AutoSetup

This area contains informations related to the autosetup.

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| AutoSetup Parameters Way 1 | 0x0000c000 | 0x0000c00c | This area contains informations related to the autosetup. |
| AutoSetup Parameters Way 2 | 0x0000c00c | 0x0000c018 | This area contains informations related to the autosetup. |
| AutoSetup Parameters Way 3 | 0x0000c018 | 0x0000c024 | This area contains informations related to the autosetup. |
| AutoSetup Parameters Way 4 | 0x0000c024 | 0x0000c030 | This area contains informations related to the autosetup. |
| AutoSetup Results Way 1 | 0x0000c100 | 0x0000c79c | This area contains informations related to result. |
| AutoSetup Results Way 2 | 0x0000c79c | 0x0000ce38 | This area contains informations related to result. |
| AutoSetup Results Way 3 | 0x0000ce38 | 0x0000d4d4 | This area contains informations related to result. |
| AutoSetup Results Way 4 | 0x0000d4d4 | 0x0000db70 | This area contains informations related to result. |
| AutoSetup Start | 0x0000ef00 | 0x0000ef04 | This area contains informations related to result. |

# AutoSetup Parameters Way 1

This area contains informations related to the autosetup.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000c000 (49152) | AutoSetup flag Parameter Way 1 | uint32 | 4 | R\W | AutoSetup bitwise flags: LSB flag is used for `apply` autosetup computed parameters. |
| 0x0000c004 (49156) | Speaker Voltage Way 1 | uint32 | 4 | R\W | AutoSetup speaker voltage |
| 0x0000c008 (49160) | Sensitivity 1 | float | 4 | R\W | AutoSetup sensitivity |

# AutoSetup Parameters Way 2

This area contains informations related to the autosetup.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000c00c (49164) | AutoSetup flag Parameter Way 2 | uint32 | 4 | R\W | AutoSetup bitwise flags: LSB flag is used for `apply` autosetup computed parameters. |
| 0x0000c010 (49168) | Speaker Voltage Way 2 | uint32 | 4 | R\W | AutoSetup speaker voltage |
| 0x0000c014 (49172) | Sensitivity 2 | float | 4 | R\W | AutoSetup sensitivity |

## AutoSetup Parameters Way 3

This area contains informations related to the autosetup.

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000c018 (49176) | AutoSetup flag Parameter Way 3 | uint32 | 4 | R\W | AutoSetup bitwise flags: LSB flag is used for `apply` autosetup computed parameters. |
| 0x0000c01c (49180) | Speaker Voltage Way 3 | uint32 | 4 | R\W | AutoSetup speaker voltage |
| 0x0000c020 (49184) | Sensitivity 3 | float | 4 | R\W | AutoSetup sensitivity |

## AutoSetup Parameters Way 4

This area contains informations related to the autosetup.

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000c024 (49188) | AutoSetup flag Parameter Way 4 | uint32 | 4 | R\W | AutoSetup bitwise flags: LSB flag is used for `apply` autosetup computed parameters. |
| 0x0000c028 (49192) | Speaker Voltage Way 4 | uint32 | 4 | R\W | AutoSetup speaker voltage |
| 0x0000c02c (49196) | Sensitivity 4 | float | 4 | R\W | AutoSetup sensitivity |

## AutoSetup Results Way 1

This area contains informations related to result.

| BlockId | Start Address | End Address | Description |
|---------|---------------|-------------|-------------|
| AutoSetup Settings Result | 0x0000c100 | 0x0000c134 | AutoSetup Settings Result |
| AutoSetup Impedance Result | 0x0000c134 | 0x0000c79c | AutoSetup Impedance Result |

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# AutoSetup Settings Result

AutoSetup Settings Result

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000c100 (49408) | AutoSetup impMeasChannelDone 1 | uint32 | 4 | R\W | AutoSetup impMeasChannelDone |
| 0x0000c104 (49412) | AutoSetup stateResult 1 | uint32 | 4 | R\W | AutoSetup stateResult |
| 0x0000c108 (49416) | AutoSetup gain 1 | float | 4 | R\W | AutoSetup gain |
| 0x0000c10c (49420) | AutoSetup hiPassFc 1 | float | 4 | R\W | AutoSetup hiPassFc |
| 0x0000c110 (49424) | AutoSetup hiPass Slope 1 | uint32 | 4 | R\W | AutoSetup hiPass Slope |
| 0x0000c114 (49428) | AutoSetup hiPass type 1 | uint32 | 4 | R\W | AutoSetup hiPass type |
| 0x0000c118 (49432) | AutoSetup zNom 1 | float | 4 | R\W | AutoSetup zNom |
| 0x0000c11c (49436) | AutoSetup peakLimiterThr 1 | float | 4 | R\W | AutoSetup peakLimiterThr |
| 0x0000c120 (49440) | AutoSetup peakLimiterAttackTime 1 | float | 4 | R\W | AutoSetup peakLimiterAttackTime |
| 0x0000c124 (49444) | AutoSetup peakLimiterReleaseTime 1 | float | 4 | R\W | AutoSetup peakLimiterReleaseTime |
| 0x0000c128 (49448) | AutoSetup rmsLimiterThr 1 | float | 4 | R\W | AutoSetup rmsLimiterThr |
| 0x0000c12c (49452) | AutoSetup rmsLimiterAttackTime 1 | float | 4 | R\W | AutoSetup rmsLimiterAttackTime |
| 0x0000c130 (49456) | AutoSetup rmsLimiterReleaseTime 1 | float | 4 | R\W | AutoSetup rmsLimiterReleaseTime |

# AutoSetup Impedance Result

AutoSetup Impedance Result

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000c134 (49460) | AutoSetup Impedance Channel | uint32 | 4 | R\W | AutoSetup Impedance Channel |
| 0x0000c138 (49464) | AutoSetup Impedance NumFreq | uint32 | 4 | R\W | AutoSetup Impedance NumFreq |
| 0x0000c13c (49468) | AutoSetup Impedance Freq | float[136] | 544 | R\W | AutoSetup Impedance Freq |
| 0x0000c35c (50012) | AutoSetup Impedance Z | complex_t[136] | 1088 | R\W | AutoSetup Impedance Z |

# AutoSetup Results Way 2

This area contains informations related to result.

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| AutoSetup Settings Result | 0x0000c79c | 0x0000c7d0 | AutoSetup Settings Result |
| AutoSetup Impedance Result | 0x0000c7d0 | 0x0000ce38 | AutoSetup Impedance Result |

# AutoSetup Settings Result

AutoSetup Settings Result

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000c79c (51100) | AutoSetup impMeasChannelDone 1 | uint32 | 4 | R\W | AutoSetup impMeasChannelDone |
| 0x0000c7a0 (51104) | AutoSetup stateResult 1 | uint32 | 4 | R\W | AutoSetup stateResult |
| 0x0000c7a4 (51108) | AutoSetup gain 1 | float | 4 | R\W | AutoSetup gain |
| 0x0000c7a8 (51112) | AutoSetup hiPassFc 1 | float | 4 | R\W | AutoSetup hiPassFc |
| 0x0000c7ac (51116) | AutoSetup hiPass Slope 1 | uint32 | 4 | R\W | AutoSetup hiPass Slope |
| 0x0000c7b0 (51120) | AutoSetup hiPass type 1 | uint32 | 4 | R\W | AutoSetup hiPass type |
| 0x0000c7b4 (51124) | AutoSetup zNom 1 | float | 4 | R\W | AutoSetup zNom |
| 0x0000c7b8 (51128) | AutoSetup peakLimiterThr 1 | float | 4 | R\W | AutoSetup peakLimiterThr |
| 0x0000c7bc (51132) | AutoSetup peakLimiterAttackTime 1 | float | 4 | R\W | AutoSetup peakLimiterAttackTime |
| 0x0000c7c0 (51136) | AutoSetup peakLimiterReleaseTime 1 | float | 4 | R\W | AutoSetup peakLimiterReleaseTime |
| 0x0000c7c4 (51140) | AutoSetup rmsLimiterThr 1 | float | 4 | R\W | AutoSetup rmsLimiterThr |
| 0x0000c7c8 (51144) | AutoSetup rmsLimiterAttackTime 1 | float | 4 | R\W | AutoSetup rmsLimiterAttackTime |
| 0x0000c7cc (51148) | AutoSetup rmsLimiterReleaseTime 1 | float | 4 | R\W | AutoSetup rmsLimiterReleaseTime |

# AutoSetup Impedance Result

AutoSetup Impedance Result

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000c7d0 (51152) | AutoSetup Impedance Channel | uint32 | 4 | R\W | AutoSetup Impedance Channel |
| 0x0000c7d4 (51156) | AutoSetup Impedance NumFreq | uint32 | 4 | R\W | AutoSetup Impedance NumFreq |
| 0x0000c7d8 (51160) | AutoSetup Impedance Freq | float[136] | 544 | R\W | AutoSetup Impedance Freq |
| 0x0000c9f8 (51704) | AutoSetup Impedance Z | complex_t[136] | 1088 | R\W | AutoSetup Impedance Z |

# AutoSetup Results Way 3

This area contains informations related to result.

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| AutoSetup Settings Result | 0x0000ce38 | 0x0000ce6c | AutoSetup Settings Result |
| AutoSetup Impedance Result | 0x0000ce6c | 0x0000d4d4 | AutoSetup Impedance Result |

# AutoSetup Settings Result

AutoSetup Settings Result

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000ce38 (52792) | AutoSetup impMeasChannelDone 1 | uint32 | 4 | R\W | AutoSetup impMeasChannelDone |
| 0x0000ce3c (52796) | AutoSetup stateResult 1 | uint32 | 4 | R\W | AutoSetup stateResult |
| 0x0000ce40 (52800) | AutoSetup gain 1 | float | 4 | R\W | AutoSetup gain |
| 0x0000ce44 (52804) | AutoSetup hiPassFc 1 | float | 4 | R\W | AutoSetup hiPassFc |
| 0x0000ce48 (52808) | AutoSetup hiPass Slope 1 | uint32 | 4 | R\W | AutoSetup hiPass Slope |
| 0x0000ce4c (52812) | AutoSetup hiPass type 1 | uint32 | 4 | R\W | AutoSetup hiPass type |
| 0x0000ce50 (52816) | AutoSetup zNom 1 | float | 4 | R\W | AutoSetup zNom |
| 0x0000ce54 (52820) | AutoSetup peakLimiterThr 1 | float | 4 | R\W | AutoSetup peakLimiterThr |
| 0x0000ce58 (52824) | AutoSetup peakLimiterAttackTime 1 | float | 4 | R\W | AutoSetup peakLimiterAttackTime |
| 0x0000ce5c (52828) | AutoSetup peakLimiterReleaseTime 1 | float | 4 | R\W | AutoSetup peakLimiterReleaseTime |
| 0x0000ce60 (52832) | AutoSetup rmsLimiterThr 1 | float | 4 | R\W | AutoSetup rmsLimiterThr |
| 0x0000ce64 (52836) | AutoSetup rmsLimiterAttackTime 1 | float | 4 | R\W | AutoSetup rmsLimiterAttackTime |
| 0x0000ce68 (52840) | AutoSetup rmsLimiterReleaseTime 1 | float | 4 | R\W | AutoSetup rmsLimiterReleaseTime |

# AutoSetup Impedance Result

AutoSetup Impedance Result

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000ce6c (52844) | AutoSetup Impedance Channel | uint32 | 4 | R\W | AutoSetup Impedance Channel |
| 0x0000ce70 (52848) | AutoSetup Impedance NumFreq | uint32 | 4 | R\W | AutoSetup Impedance NumFreq |
| 0x0000ce74 (52852) | AutoSetup Impedance Freq | float[136] | 544 | R\W | AutoSetup Impedance Freq |
| 0x0000d094 (53396) | AutoSetup Impedance Z | complex_t[136] | 1088 | R\W | AutoSetup Impedance Z |

# AutoSetup Results Way 4

This area contains informations related to result.

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| AutoSetup Settings Result | 0x0000d4d4 | 0x0000d508 | AutoSetup Settings Result |
| AutoSetup Impedance Result | 0x0000d508 | 0x0000db70 | AutoSetup Impedance Result |

# AutoSetup Settings Result

AutoSetup Settings Result

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000d4d4 (54484) | AutoSetup impMeasChannelDone 1 | uint32 | 4 | R\W | AutoSetup impMeasChannelDone |
| 0x0000d4d8 (54488) | AutoSetup stateResult 1 | uint32 | 4 | R\W | AutoSetup stateResult |
| 0x0000d4dc (54492) | AutoSetup gain 1 | float | 4 | R\W | AutoSetup gain |
| 0x0000d4e0 (54496) | AutoSetup hiPassFc 1 | float | 4 | R\W | AutoSetup hiPassFc |
| 0x0000d4e4 (54500) | AutoSetup hiPass Slope 1 | uint32 | 4 | R\W | AutoSetup hiPass Slope |
| 0x0000d4e8 (54504) | AutoSetup hiPass type 1 | uint32 | 4 | R\W | AutoSetup hiPass type |
| 0x0000d4ec (54508) | AutoSetup zNom 1 | float | 4 | R\W | AutoSetup zNom |
| 0x0000d4f0 (54512) | AutoSetup peakLimiterThr 1 | float | 4 | R\W | AutoSetup peakLimiterThr |
| 0x0000d4f4 (54516) | AutoSetup peakLimiterAttackTime 1 | float | 4 | R\W | AutoSetup peakLimiterAttackTime |
| 0x0000d4f8 (54520) | AutoSetup peakLimiterReleaseTime 1 | float | 4 | R\W | AutoSetup peakLimiterReleaseTime |
| 0x0000d4fc (54524) | AutoSetup rmsLimiterThr 1 | float | 4 | R\W | AutoSetup rmsLimiterThr |
| 0x0000d500 (54528) | AutoSetup rmsLimiterAttackTime 1 | float | 4 | R\W | AutoSetup rmsLimiterAttackTime |
| 0x0000d504 (54532) | AutoSetup rmsLimiterReleaseTime 1 | float | 4 | R\W | AutoSetup rmsLimiterReleaseTime |

# AutoSetup Impedance Result

AutoSetup Impedance Result

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000d508 (54536) | AutoSetup Impedance Channel | uint32 | 4 | R\W | AutoSetup Impedance Channel |
| 0x0000d50c (54540) | AutoSetup Impedance NumFreq | uint32 | 4 | R\W | AutoSetup Impedance NumFreq |
| 0x0000d510 (54544) | AutoSetup Impedance Freq | float[136] | 544 | R\W | AutoSetup Impedance Freq |
| 0x0000d730 (55088) | AutoSetup Impedance Z | complex_t[136] | 1088 | R\W | AutoSetup Impedance Z |

# AutoSetup Start

This area contains informations related to result.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000ef00 (61184) | AutoSetup Start on channel | uint32 | 4 | R\W | Write here the channel where init the AutoSetup -> eg: `0` | `1` | `2` |`3` |

# Zone Block

This area contains informations related to the amplifiers zones.

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| Zone Common Settings | 0x0000f000 | 0x0000f038 | This area contains the zone block common settings. |
| Zone EQ | 0x0000f100 | 0x0000f340 | This area contains the zone eq settings. |

# Zone Common Settings

This area contains the zone block common settings.

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| Enable | 0x0000f000 | 0x0000f004 | The zone enable. |
| Mute | 0x0000f004 | 0x0000f008 | The zone mute. |
| Gain | 0x0000f008 | 0x0000f018 | The zone gain in linear. |
| Source GUID | 0x0000f018 | 0x0000f028 | The zone source GUID. |
| Zone GUID | 0x0000f028 | 0x0000f038 | The zone GUID. |

# Enable

The zone enable.

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000f000 (61440) | Zone Enable 1 | uint8 | 1 | R\W | The zone enable CH 1. |
| 0x0000f001 (61441) | Zone Enable 2 | uint8 | 1 | R\W | The zone enable CH 2. |
| 0x0000f002 (61442) | Zone Enable 3 | uint8 | 1 | R\W | The zone enable CH 3. |
| 0x0000f003 (61443) | Zone Enable 4 | uint8 | 1 | R\W | The zone enable CH 4. |

# Mute

The zone mute.

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000f004 (61444) | Zone Mute 1 | uint8 | 1 | R\W | The zone mute CH 1. |
| 0x0000f005 (61445) | Zone Mute 2 | uint8 | 1 | R\W | The zone mute CH 2. |
| 0x0000f006 (61446) | Zone Mute 3 | uint8 | 1 | R\W | The zone mute CH 3. |
| 0x0000f007 (61447) | Zone Mute 4 | uint8 | 1 | R\W | The zone mute CH 4. |

# Gain

The zone gain in linear.

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000f008 (61448) | Zone Gain 1 | Float | 4 | R\W | The zone gain in linear CH 1. |
| 0x0000f00c (61452) | Zone Gain 2 | Float | 4 | R\W | The zone gain in linear CH 2. |
| 0x0000f010 (61456) | Zone Gain 3 | Float | 4 | R\W | The zone gain in linear CH 3. |
| 0x0000f014 (61460) | Zone Gain 4 | Float | 4 | R\W | The zone gain in linear CH 4. |

# Source GUID

The zone source GUID.

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000f018 (61464) | Source GUID 1 | uint32 | 4 | R\W | The source GUID CH 1. |
| 0x0000f01c (61468) | Source GUID 2 | uint32 | 4 | R\W | The source GUID CH 2. |
| 0x0000f020 (61472) | Source GUID 3 | uint32 | 4 | R\W | The source GUID CH 3. |
| 0x0000f024 (61476) | Source GUID 4 | uint32 | 4 | R\W | The source GUID CH 4. |

# Zone GUID

The zone GUID.

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000f028 (61480) | Zone GUID 1 | uint32 | 4 | R\W | The zone GUID CH 1. |
| 0x0000f02c (61484) | Zone GUID 2 | uint32 | 4 | R\W | The zone GUID CH 2. |
| 0x0000f030 (61488) | Zone GUID 3 | uint32 | 4 | R\W | The zone GUID CH 3. |
| 0x0000f034 (61492) | Zone GUID 4 | uint32 | 4 | R\W | The zone GUID CH 4. |

# Zone EQ

This area contains the zone eq settings.

| BlockId | Start Address | End Address | Description |
|---------|---------------|-------------|-------------|
| Source EQ Channel 1 | 0x0000f100 | 0x0000f130 | This area contains the source eq settings. |
| Source EQ Channel 2 | 0x0000f130 | 0x0000f160 | This area contains the source eq settings. |
| Source EQ Channel 3 | 0x0000f160 | 0x0000f190 | This area contains the source eq settings. |
| Source EQ Channel 4 | 0x0000f190 | 0x0000f1c0 | This area contains the source eq settings. |
| Zone EQ Channel 1 | 0x0000f1c0 | 0x0000f220 | This area contains the zone eq settings. |
| Zone EQ Channel 2 | 0x0000f220 | 0x0000f280 | This area contains the zone eq settings. |
| Zone EQ Channel 3 | 0x0000f280 | 0x0000f2e0 | This area contains the zone eq settings. |
| Zone EQ Channel 4 | 0x0000f2e0 | 0x0000f340 | This area contains the zone eq settings. |

# Source EQ Channel 1

This area contains the source eq settings.

| BlockId | Start Address | End Address | Description |
|---------|---------------|-------------|-------------|
| Source Eq Channel 1 BiQuad 1 settings | 0x0000f100 | 0x0000f118 | This area contains the source equalizer biQuad settings. |
| Source Eq Channel 1 BiQuad 2 settings | 0x0000f118 | 0x0000f130 | This area contains the source equalizer biQuad settings. |

# Source Eq Channel 1 BiQuad 1 settings

This area contains the source equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000f100 (61696) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x0000f104 (61700) | Type | uint32 | 4 | R\W | The filter type. Valid values are: |

| Values | Type |
|---|---|
| 0 | Peaking |
| 11 | Low-Shelving |
| 12 | High-Shelving |
| 13 | Low-pass |
| 14 | High-pass |
| 15 | BandPass |
| 16 | Band-stop |
| 17 | All-pass |

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000f108 (61704) | Q | Float | 4 | R\W | The filter Q |
| 0x0000f10c (61708) | Slope | Float | 4 | R\W | The filter Slope |
| 0x0000f110 (61712) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x0000f114 (61716) | Gain | Float | 4 | R\W | The linear gain |

# Source Eq Channel 1 BiQuad 2 settings

This area contains the source equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000f118 (61720) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x0000f11c (61724) | Type | uint32 | 4 | R\W | The filter type. Valid values are: |

| Values | Type |
|---|---|
| 0 | Peaking |
| 11 | Low-Shelving |
| 12 | High-Shelving |
| 13 | Low-pass |
| 14 | High-pass |
| 15 | BandPass |
| 16 | Band-stop |
| 17 | All-pass |

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000f120 (61728) | Q | Float | 4 | R\W | The filter Q |
| 0x0000f124 (61732) | Slope | Float | 4 | R\W | The filter Slope |
| 0x0000f128 (61736) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x0000f12c (61740) | Gain | Float | 4 | R\W | The linear gain |

# Source EQ Channel 2

This area contains the source eq settings.

| BlockId | Start Address | End Address | Description |
|---------|---------------|-------------|-------------|
| Source Eq Channel 2 BiQuad 1 settings | 0x0000f130 | 0x0000f148 | This area contains the source equalizer biQuad settings. |
| Source Eq Channel 2 BiQuad 2 settings | 0x0000f148 | 0x0000f160 | This area contains the source equalizer biQuad settings. |

# Source Eq Channel 2 BiQuad 1 settings

This area contains the source equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000f130 (61744) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x0000f134 (61748) | Type | uint32 | 4 | R\W | The filter type. Valid values are: <table><tr><td>Values</td><td>Type</td></tr><tr><td>0</td><td>Peaking</td></tr><tr><td>11</td><td>Low-Shelving</td></tr><tr><td>12</td><td>High-Shelving</td></tr><tr><td>13</td><td>Low-pass</td></tr><tr><td>14</td><td>High-pass</td></tr><tr><td>15</td><td>BandPass</td></tr><tr><td>16</td><td>Band-stop</td></tr><tr><td>17</td><td>All-pass</td></tr></table> |
| 0x0000f138 (61752) | Q | Float | 4 | R\W | The filter Q |
| 0x0000f13c (61756) | Slope | Float | 4 | R\W | The filter Slope |
| 0x0000f140 (61760) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x0000f144 (61764) | Gain | Float | 4 | R\W | The linear gain |

# Source Eq Channel 2 BiQuad 2 settings

This area contains the source equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000f148 (61768) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x0000f14c (61772) | Type | uint32 | 4 | R\W | The filter type. Valid values are: <table><tr><th>Values</th><th>Type</th></tr><tr><td>0</td><td>Peaking</td></tr><tr><td>11</td><td>Low-Shelving</td></tr><tr><td>12</td><td>High-Shelving</td></tr><tr><td>13</td><td>Low-pass</td></tr><tr><td>14</td><td>High-pass</td></tr><tr><td>15</td><td>BandPass</td></tr><tr><td>16</td><td>Band-stop</td></tr><tr><td>17</td><td>All-pass</td></tr></table> |
| 0x0000f150 (61776) | Q | Float | 4 | R\W | The filter Q |
| 0x0000f154 (61780) | Slope | Float | 4 | R\W | The filter Slope |
| 0x0000f158 (61784) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x0000f15c (61788) | Gain | Float | 4 | R\W | The linear gain |

# Source EQ Channel 3

This area contains the source eq settings.

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| Source Eq Channel 3 BiQuad 1 settings | 0x0000f160 | 0x0000f178 | This area contains the source equalizer biQuad settings. |
| Source Eq Channel 3 BiQuad 2 settings | 0x0000f178 | 0x0000f190 | This area contains the source equalizer biQuad settings. |

# Source Eq Channel 3 BiQuad 1 settings

This area contains the source equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000f160 (61792) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x0000f164 (61796) | Type | uint32 | 4 | R\W | The filter type. Valid values are: |

The filter type. Valid values are:

| Values | Type |
|---|---|
| 0 | Peaking |
| 11 | Low-Shelving |
| 12 | High-Shelving |
| 13 | Low-pass |
| 14 | High-pass |
| 15 | BandPass |
| 16 | Band-stop |
| 17 | All-pass |

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000f168 (61800) | Q | Float | 4 | R\W | The filter Q |
| 0x0000f16c (61804) | Slope | Float | 4 | R\W | The filter Slope |
| 0x0000f170 (61808) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x0000f174 (61812) | Gain | Float | 4 | R\W | The linear gain |

# Source Eq Channel 3 BiQuad 2 settings

This area contains the source equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000f178 (61816) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x0000f17c (61820) | Type | uint32 | 4 | R\W | The filter type. Valid values are: |

The filter type. Valid values are:

| Values | Type |
|---|---|
| 0 | Peaking |
| 11 | Low-Shelving |
| 12 | High-Shelving |
| 13 | Low-pass |
| 14 | High-pass |
| 15 | BandPass |
| 16 | Band-stop |
| 17 | All-pass |

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000f180 (61824) | Q | Float | 4 | R\W | The filter Q |
| 0x0000f184 (61828) | Slope | Float | 4 | R\W | The filter Slope |
| 0x0000f188 (61832) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x0000f18c (61836) | Gain | Float | 4 | R\W | The linear gain |

# Source EQ Channel 4

This area contains the source eq settings.

| BlockId | Start Address | End Address | Description |
|---------|---------------|-------------|-------------|
| Source Eq Channel 4 BiQuad 1 settings | 0x0000f190 | 0x0000f1a8 | This area contains the source equalizer biQuad settings. |
| Source Eq Channel 4 BiQuad 2 settings | 0x0000f1a8 | 0x0000f1c0 | This area contains the source equalizer biQuad settings. |

# Source Eq Channel 4 BiQuad 1 settings

This area contains the source equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000f190 (61840) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x0000f194 (61844) | Type | uint32 | 4 | R\W | The filter type. Valid values are: |
| 0x0000f198 (61848) | Q | Float | 4 | R\W | The filter Q |
| 0x0000f19c (61852) | Slope | Float | 4 | R\W | The filter Slope |
| 0x0000f1a0 (61856) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x0000f1a4 (61860) | Gain | Float | 4 | R\W | The linear gain |

For the Type field, valid values are:

| Values | Type |
|--------|------|
| 0 | Peaking |
| 11 | Low-Shelving |
| 12 | High-Shelving |
| 13 | Low-pass |
| 14 | High-pass |
| 15 | BandPass |
| 16 | Band-stop |
| 17 | All-pass |

# Source Eq Channel 4 BiQuad 2 settings

This area contains the source equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000f1a8 (61864) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x0000f1ac (61868) | Type | uint32 | 4 | R\W | The filter type. Valid values are: |

| Values | Type |
|---|---|
| 0 | Peaking |
| 11 | Low-Shelving |
| 12 | High-Shelving |
| 13 | Low-pass |
| 14 | High-pass |
| 15 | BandPass |
| 16 | Band-stop |
| 17 | All-pass |

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000f1b0 (61872) | Q | Float | 4 | R\W | The filter Q |
| 0x0000f1b4 (61876) | Slope | Float | 4 | R\W | The filter Slope |
| 0x0000f1b8 (61880) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x0000f1bc (61884) | Gain | Float | 4 | R\W | The linear gain |

# Zone EQ Channel 1

This area contains the zone eq settings.

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| Zone Eq Channel 1 BiQuad 1 settings | 0x0000f1c0 | 0x0000f1d8 | This area contains the zone equalizer biQuad settings. |
| Zone Eq Channel 1 BiQuad 2 settings | 0x0000f1d8 | 0x0000f1f0 | This area contains the zone equalizer biQuad settings. |
| Zone Eq Channel 1 BiQuad 3 settings | 0x0000f1f0 | 0x0000f208 | This area contains the zone equalizer biQuad settings. |
| Zone Eq Channel 1 BiQuad 4 settings | 0x0000f208 | 0x0000f220 | This area contains the zone equalizer biQuad settings. |

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# Zone Eq Channel 1 BiQuad 1 settings

This area contains the zone equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000f1c0 (61888) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x0000f1c4 (61892) | Type | uint32 | 4 | R\W | The filter type. Valid values are: |
| 0x0000f1c8 (61896) | Q | Float | 4 | R\W | The filter Q |
| 0x0000f1cc (61900) | Slope | Float | 4 | R\W | The filter Slope |
| 0x0000f1d0 (61904) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x0000f1d4 (61908) | Gain | Float | 4 | R\W | The linear gain |

For offset 0x0000f1c4 (Type), the filter type valid values are:

| Values | Type |
|---|---|
| 0 | Peaking |
| 11 | Low-Shelving |
| 12 | High-Shelving |
| 13 | Low-pass |
| 14 | High-pass |
| 15 | BandPass |
| 16 | Band-stop |
| 17 | All-pass |

# Zone Eq Channel 1 BiQuad 2 settings

This area contains the zone equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000f1d8 (61912) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x0000f1dc (61916) | Type | uint32 | 4 | R\W | The filter type. Valid values are: |
| 0x0000f1e0 (61920) | Q | Float | 4 | R\W | The filter Q |
| 0x0000f1e4 (61924) | Slope | Float | 4 | R\W | The filter Slope |
| 0x0000f1e8 (61928) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x0000f1ec (61932) | Gain | Float | 4 | R\W | The linear gain |

For offset 0x0000f1dc (Type), the filter type valid values are:

| Values | Type |
|---|---|
| 0 | Peaking |
| 11 | Low-Shelving |
| 12 | High-Shelving |
| 13 | Low-pass |
| 14 | High-pass |
| 15 | BandPass |
| 16 | Band-stop |
| 17 | All-pass |

# Zone Eq Channel 1 BiQuad 3 settings

This area contains the zone equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000f1f0 (61936) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x0000f1f4 (61940) | Type | uint32 | 4 | R\W | The filter type. Valid values are: |

| Values | Type |
|---|---|
| 0 | Peaking |
| 11 | Low-Shelving |
| 12 | High-Shelving |
| 13 | Low-pass |
| 14 | High-pass |
| 15 | BandPass |
| 16 | Band-stop |
| 17 | All-pass |

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000f1f8 (61944) | Q | Float | 4 | R\W | The filter Q |
| 0x0000f1fc (61948) | Slope | Float | 4 | R\W | The filter Slope |
| 0x0000f200 (61952) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x0000f204 (61956) | Gain | Float | 4 | R\W | The linear gain |

# Zone Eq Channel 1 BiQuad 4 settings

This area contains the zone equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000f208 (61960) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x0000f20c (61964) | Type | uint32 | 4 | R\W | The filter type. Valid values are: |

| Values | Type |
|---|---|
| 0 | Peaking |
| 11 | Low-Shelving |
| 12 | High-Shelving |
| 13 | Low-pass |
| 14 | High-pass |
| 15 | BandPass |
| 16 | Band-stop |
| 17 | All-pass |

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000f210 (61968) | Q | Float | 4 | R\W | The filter Q |
| 0x0000f214 (61972) | Slope | Float | 4 | R\W | The filter Slope |
| 0x0000f218 (61976) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x0000f21c (61980) | Gain | Float | 4 | R\W | The linear gain |

# Zone EQ Channel 2

This area contains the zone eq settings.

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| Zone Eq Channel 2 BiQuad 1 settings | 0x0000f220 | 0x0000f238 | This area contains the zone equalizer biQuad settings. |
| Zone Eq Channel 2 BiQuad 2 settings | 0x0000f238 | 0x0000f250 | This area contains the zone equalizer biQuad settings. |
| Zone Eq Channel 2 BiQuad 3 settings | 0x0000f250 | 0x0000f268 | This area contains the zone equalizer biQuad settings. |
| Zone Eq Channel 2 BiQuad 4 settings | 0x0000f268 | 0x0000f280 | This area contains the zone equalizer biQuad settings. |

# Zone Eq Channel 2 BiQuad 1 settings

This area contains the zone equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000f220 (61984) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x0000f224 (61988) | Type | uint32 | 4 | R\W | The filter type. Valid values are: <table><tr><th>Values</th><th>Type</th></tr><tr><td>0</td><td>Peaking</td></tr><tr><td>11</td><td>Low-Shelving</td></tr><tr><td>12</td><td>High-Shelving</td></tr><tr><td>13</td><td>Low-pass</td></tr><tr><td>14</td><td>High-pass</td></tr><tr><td>15</td><td>BandPass</td></tr><tr><td>16</td><td>Band-stop</td></tr><tr><td>17</td><td>All-pass</td></tr></table> |
| 0x0000f228 (61992) | Q | Float | 4 | R\W | The filter Q |
| 0x0000f22c (61996) | Slope | Float | 4 | R\W | The filter Slope |
| 0x0000f230 (62000) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x0000f234 (62004) | Gain | Float | 4 | R\W | The linear gain |

# Zone Eq Channel 2 BiQuad 2 settings

This area contains the zone equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000f238 (62008) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x0000f23c (62012) | Type | uint32 | 4 | R\W | The filter type. Valid values are: |

The filter type. Valid values are:

| Values | Type |
|---|---|
| 0 | Peaking |
| 11 | Low-Shelving |
| 12 | High-Shelving |
| 13 | Low-pass |
| 14 | High-pass |
| 15 | BandPass |
| 16 | Band-stop |
| 17 | All-pass |

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000f240 (62016) | Q | Float | 4 | R\W | The filter Q |
| 0x0000f244 (62020) | Slope | Float | 4 | R\W | The filter Slope |
| 0x0000f248 (62024) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x0000f24c (62028) | Gain | Float | 4 | R\W | The linear gain |

# Zone Eq Channel 2 BiQuad 3 settings

This area contains the zone equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000f250 (62032) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x0000f254 (62036) | Type | uint32 | 4 | R\W | The filter type. Valid values are: |

The filter type. Valid values are:

| Values | Type |
|---|---|
| 0 | Peaking |
| 11 | Low-Shelving |
| 12 | High-Shelving |
| 13 | Low-pass |
| 14 | High-pass |
| 15 | BandPass |
| 16 | Band-stop |
| 17 | All-pass |

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000f258 (62040) | Q | Float | 4 | R\W | The filter Q |
| 0x0000f25c (62044) | Slope | Float | 4 | R\W | The filter Slope |
| 0x0000f260 (62048) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x0000f264 (62052) | Gain | Float | 4 | R\W | The linear gain |

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# Zone Eq Channel 2 BiQuad 4 settings

This area contains the zone equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000f268 (62056) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x0000f26c (62060) | Type | uint32 | 4 | R\W | The filter type. Valid values are: |

| Values | Type |
|---|---|
| 0 | Peaking |
| 11 | Low-Shelving |
| 12 | High-Shelving |
| 13 | Low-pass |
| 14 | High-pass |
| 15 | BandPass |
| 16 | Band-stop |
| 17 | All-pass |

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000f270 (62064) | Q | Float | 4 | R\W | The filter Q |
| 0x0000f274 (62068) | Slope | Float | 4 | R\W | The filter Slope |
| 0x0000f278 (62072) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x0000f27c (62076) | Gain | Float | 4 | R\W | The linear gain |

# Zone EQ Channel 3

This area contains the zone eq settings.

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| Zone Eq Channel 3 BiQuad 1 settings | 0x0000f280 | 0x0000f298 | This area contains the zone equalizer biQuad settings. |
| Zone Eq Channel 3 BiQuad 2 settings | 0x0000f298 | 0x0000f2b0 | This area contains the zone equalizer biQuad settings. |
| Zone Eq Channel 3 BiQuad 3 settings | 0x0000f2b0 | 0x0000f2c8 | This area contains the zone equalizer biQuad settings. |
| Zone Eq Channel 3 BiQuad 4 settings | 0x0000f2c8 | 0x0000f2e0 | This area contains the zone equalizer biQuad settings. |

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# Zone Eq Channel 3 BiQuad 1 settings

This area contains the zone equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000f280 (62080) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x0000f284 (62084) | Type | uint32 | 4 | R\W | The filter type. Valid values are: |

| Values | Type |
|--------|------|
| 0 | Peaking |
| 11 | Low-Shelving |
| 12 | High-Shelving |
| 13 | Low-pass |
| 14 | High-pass |
| 15 | BandPass |
| 16 | Band-stop |
| 17 | All-pass |

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000f288 (62088) | Q | Float | 4 | R\W | The filter Q |
| 0x0000f28c (62092) | Slope | Float | 4 | R\W | The filter Slope |
| 0x0000f290 (62096) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x0000f294 (62100) | Gain | Float | 4 | R\W | The linear gain |

# Zone Eq Channel 3 BiQuad 2 settings

This area contains the zone equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000f298 (62104) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x0000f29c (62108) | Type | uint32 | 4 | R\W | The filter type. Valid values are: |

| Values | Type |
|--------|------|
| 0 | Peaking |
| 11 | Low-Shelving |
| 12 | High-Shelving |
| 13 | Low-pass |
| 14 | High-pass |
| 15 | BandPass |
| 16 | Band-stop |
| 17 | All-pass |

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x0000f2a0 (62112) | Q | Float | 4 | R\W | The filter Q |
| 0x0000f2a4 (62116) | Slope | Float | 4 | R\W | The filter Slope |
| 0x0000f2a8 (62120) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x0000f2ac (62124) | Gain | Float | 4 | R\W | The linear gain |

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# Zone Eq Channel 3 BiQuad 3 settings

This area contains the zone equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000f2b0 (62128) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x0000f2b4 (62132) | Type | uint32 | 4 | R\W | The filter type. Valid values are: |
| 0x0000f2b8 (62136) | Q | Float | 4 | R\W | The filter Q |
| 0x0000f2bc (62140) | Slope | Float | 4 | R\W | The filter Slope |
| 0x0000f2c0 (62144) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x0000f2c4 (62148) | Gain | Float | 4 | R\W | The linear gain |

| Values | Type |
|---|---|
| 0 | Peaking |
| 11 | Low-Shelving |
| 12 | High-Shelving |
| 13 | Low-pass |
| 14 | High-pass |
| 15 | BandPass |
| 16 | Band-stop |
| 17 | All-pass |

# Zone Eq Channel 3 BiQuad 4 settings

This area contains the zone equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000f2c8 (62152) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x0000f2cc (62156) | Type | uint32 | 4 | R\W | The filter type. Valid values are: |
| 0x0000f2d0 (62160) | Q | Float | 4 | R\W | The filter Q |
| 0x0000f2d4 (62164) | Slope | Float | 4 | R\W | The filter Slope |
| 0x0000f2d8 (62168) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x0000f2dc (62172) | Gain | Float | 4 | R\W | The linear gain |

| Values | Type |
|---|---|
| 0 | Peaking |
| 11 | Low-Shelving |
| 12 | High-Shelving |
| 13 | Low-pass |
| 14 | High-pass |
| 15 | BandPass |
| 16 | Band-stop |
| 17 | All-pass |

# Zone EQ Channel 4

This area contains the zone eq settings.

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| Zone Eq Channel 4 BiQuad 1 settings | 0x0000f2e0 | 0x0000f2f8 | This area contains the zone equalizer biQuad settings. |
| Zone Eq Channel 4 BiQuad 2 settings | 0x0000f2f8 | 0x0000f310 | This area contains the zone equalizer biQuad settings. |
| Zone Eq Channel 4 BiQuad 3 settings | 0x0000f310 | 0x0000f328 | This area contains the zone equalizer biQuad settings. |
| Zone Eq Channel 4 BiQuad 4 settings | 0x0000f328 | 0x0000f340 | This area contains the zone equalizer biQuad settings. |

# Zone Eq Channel 4 BiQuad 1 settings

This area contains the zone equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000f2e0 (62176) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x0000f2e4 (62180) | Type | uint32 | 4 | R\W | The filter type. Valid values are: <table><tr><th>Values</th><th>Type</th></tr><tr><td>0</td><td>Peaking</td></tr><tr><td>11</td><td>Low-Shelving</td></tr><tr><td>12</td><td>High-Shelving</td></tr><tr><td>13</td><td>Low-pass</td></tr><tr><td>14</td><td>High-pass</td></tr><tr><td>15</td><td>BandPass</td></tr><tr><td>16</td><td>Band-stop</td></tr><tr><td>17</td><td>All-pass</td></tr></table> |
| 0x0000f2e8 (62184) | Q | Float | 4 | R\W | The filter Q |
| 0x0000f2ec (62188) | Slope | Float | 4 | R\W | The filter Slope |
| 0x0000f2f0 (62192) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x0000f2f4 (62196) | Gain | Float | 4 | R\W | The linear gain |

# Zone Eq Channel 4 BiQuad 2 settings

This area contains the zone equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000f2f8 (62200) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x0000f2fc (62204) | Type | uint32 | 4 | R\W | The filter type. Valid values are: |

| Values | Type |
|---|---|
| 0 | Peaking |
| 11 | Low-Shelving |
| 12 | High-Shelving |
| 13 | Low-pass |
| 14 | High-pass |
| 15 | BandPass |
| 16 | Band-stop |
| 17 | All-pass |

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000f300 (62208) | Q | Float | 4 | R\W | The filter Q |
| 0x0000f304 (62212) | Slope | Float | 4 | R\W | The filter Slope |
| 0x0000f308 (62216) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x0000f30c (62220) | Gain | Float | 4 | R\W | The linear gain |

# Zone Eq Channel 4 BiQuad 3 settings

This area contains the zone equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000f310 (62224) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x0000f314 (62228) | Type | uint32 | 4 | R\W | The filter type. Valid values are: |

| Values | Type |
|---|---|
| 0 | Peaking |
| 11 | Low-Shelving |
| 12 | High-Shelving |
| 13 | Low-pass |
| 14 | High-pass |
| 15 | BandPass |
| 16 | Band-stop |
| 17 | All-pass |

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000f318 (62232) | Q | Float | 4 | R\W | The filter Q |
| 0x0000f31c (62236) | Slope | Float | 4 | R\W | The filter Slope |
| 0x0000f320 (62240) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x0000f324 (62244) | Gain | Float | 4 | R\W | The linear gain |

# Zone Eq Channel 4 BiQuad 4 settings

This area contains the zone equalizer biQuad settings.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000f328 (62248) | Enabled | uint32 | 4 | R\W | The enable flag |
| 0x0000f32c (62252) | Type | uint32 | 4 | R\W | The filter type. Valid values are: |

| Values | Type |
|---|---|
| 0 | Peaking |
| 11 | Low-Shelving |
| 12 | High-Shelving |
| 13 | Low-pass |
| 14 | High-pass |
| 15 | BandPass |
| 16 | Band-stop |
| 17 | All-pass |

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x0000f330 (62256) | Q | Float | 4 | R\W | The filter Q |
| 0x0000f334 (62260) | Slope | Float | 4 | R\W | The filter Slope |
| 0x0000f338 (62264) | Frequency | uint32 | 4 | R\W | The filter frequency |
| 0x0000f33c (62268) | Gain | Float | 4 | R\W | The linear gain |

# Dante Settings

This area contains UXT chip informations about status and settings. It includes as well available commands.

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| General Info | 0x00010000 | 0x00010074 | This area contains the general information about the Ultimo chip |
| Network Basic | 0x00010100 | 0x00010134 | This area contains the information about current Network Settings |
| Model Manufacturer Info | 0x00010200 | 0x00010268 | This area contains the information about Manufacturer |
| Audio Basic | 0x00010300 | 0x00010324 | This area contains the information about Audio Basic Settings |
| Routing RX Channels Settings | 0x00010400 | 0x000106a0 | This area contains the information about Routing RX Channels Settings |
| Routing TX Channels Settings | 0x00010800 | 0x00010980 | This area contains the information about Routing TX Channels Settings |
| Device Identity | 0x00010a00 | 0x00010aa5 | This area contains the information about Device Identity |
| Device SRate | 0x00010b00 | 0x00010b00 | This area contains the information about Device SRate. |
| Device AES67 | 0x00010c00 | 0x00010c00 | This area contains the information about Device AES67. |
| Device Routing Performance | 0x00010d00 | 0x00010d00 | This area contains the information about Device Routing Performance. |
| Device Lock Unlock | 0x00010e00 | 0x00010e00 | This area contains the information about Device Lock Unlock. |
| Device Basic Clock | 0x00010f00 | 0x00010f00 | This area contains the information about Device Basic Clock. |
| Device VLAN | 0x00011000 | 0x000110f8 | This area contains the information about Device VLAN. |
| Device Switch Status | 0x00011200 | 0x0001122c | This area contains the information about Device Switch Status. |
| Set Dante Network | 0x00012000 | 0x0001200c | This command sets the IP, Netmask and Gateway for the UXT chip. To set DHCP, message field must be set to 0. |
| Set Dante ID | 0x00012010 | 0x00012030 | This command sets the UXT chip friendly name. |
| Set Dante Tx Label | 0x00012030 | 0x00012052 | This command sets the label for a specific Tx channel. |
| Dante Tapping | 0x00012060 | 0x000120a2 | This command links a Rx channel to the specified Tx channel of a Tx device. |
| Dante Reboot | 0x000120b0 | 0x000120b1 | This command reboots the UXT chip. |

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# General Info

This area contains the general information about the Ultimo chip

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00010000 (65536) | Time of Last Read | uint32 | 4 | R | The number of ticks when last read of this area has been done. |
| 0x00010004 (65540) | Time of Prev Read | uint32 | 4 | R | The number of ticks when previous read of this area has been done. |
| 0x00010008 (65544) | Time of Last Change | uint32 | 4 | R | The number of ticks when this area has changed last time. |
| 0x0001000c (65548) | Data is Valid | uint32 | 4 | R | If data read are valid this fields value is 1, if not is 0. |
| 0x00010010 (65552) | Module ID string | char[32] | 32 | R | ID string of Ultimo chip Manufacturer |
| 0x00010030 (65584) | Model ID | char[32] | 32 | R | ID of Ultimo chip Model |
| 0x00010050 (65616) | Software Version | uint32 | 4 | R | Software version of Ultimo chip. The most significant byte shows the first digit, the next byte shows the second digit and the two least significant byte show the third digit. |
| 0x00010054 (65620) | Software Build | uint32 | 4 | R | Software build of Ultimo chip |
| 0x00010058 (65624) | Firmware Version | uint32 | 4 | R | Firmware version of Ultimo chip. The most significant byte shows the first digit, the next byte shows the second digit and the two least significant byte show the third digit. |
| 0x0001005c (65628) | Firmware Build | uint32 | 4 | R | Firmware build of Ultimo chip |
| 0x00010060 (65632) | BootLoader Version | uint32 | 4 | R | BootLoader Version of Ultimo chip |
| 0x00010064 (65636) | BootLoader Build | uint32 | 4 | R | BootLoader build of Ultimo chip |
| 0x00010068 (65640) | Api Version | uint32 | 4 | R | Api Version of Ultimo chip |
| 0x0001006c (65644) | Cap Flags | uint32 | 4 | R | Cap Flags of Ultimo chip |
| 0x00010070 (65648) | Status Flags | uint32 | 4 | R | Status Flags of Ultimo chip |

# Network Basic

This area contains the information about current Network Settings

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00010100 (65792) | Time of Last Read | uint32 | 4 | R | The number of ticks when last read of this area has been done. |
| 0x00010104 (65796) | Time of Prev Read | uint32 | 4 | R | The number of ticks when previous read of this area has been done. |
| 0x00010108 (65800) | Time of Last Change | uint32 | 4 | R | The number of ticks when this area has changed last time. |
| 0x0001010c (65804) | Data is Valid | uint32 | 4 | R | If data read are valid this fields value is 1, if not is 0. |
| 0x00010110 (65808) | Number of Interfaces | uint16 | 2 | R | Number of available network interfaces. Mezzo has only 1. |
| 0x00010114 (65812) | MAC Address | uint8[6] | 6 | R | Ultimo MAC address expressed in big endian. If MAC address is 00:1D:C1:AA:BB:CC, bytes are: |
| 0x0001011a (65818) | Flags | uint16 | 2 | R | Flags of Network Interface. |
| 0x0001011c (65820) | Mode | uint16 | 2 | R | If value is 4 the IP is static if not is Dynamic. |
| 0x00010120 (65824) | Speed | uint32 | 4 | R | Speed of the Network Interface |
| 0x00010124 (65828) | Number of Addresses | uint16 | 2 | R | Number of Addresses on the Network interface |
| 0x00010126 (65830) | Family | uint16 | 2 | R | Family of the IP Address |
| 0x00010128 (65832) | IPAddress | uint8[4] | 4 | R\W | It's the IP address of this Network Interface. Is expressed in big endian, example: |
| 0x0001012c (65836) | Net Mask | uint8[4] | 4 | R\W | It's the Net Mask of this Network Interface. |
| 0x00010130 (65840) | Gateway | uint8[4] | 4 | R\W | It's the Gateway of this Network Interface. |

MAC Address byte table:

| offset | bytes |
|---|---|
| 0x00 | 0x00 |
| 0x01 | 0x1D |
| 0x02 | 0xC1 |
| 0x03 | 0xAA |
| 0x04 | 0xBB |
| 0x05 | 0xCC |

IPAddress byte table:

| offset | bytes |
|---|---|
| 0x00 | 0xC0 (192) |
| 0x01 | 0xA8 (168) |
| 0x02 | 0x37 ( 55) |
| 0x03 | 0x6C (108) |

# Model Manufacturer Info

This area contains the information about Manufacturer

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x00010200 (66048) | Time of Last Read | uint32 | 4 | R | The number of ticks when last read of this area has been done. |
| 0x00010204 (66052) | Time of Prev Read | uint32 | 4 | R | The number of ticks when previous read of this area has been done. |
| 0x00010208 (66056) | Time of Last Change | uint32 | 4 | R | The number of ticks when this area has changed last time. |
| 0x0001020c (66060) | Data is Valid | uint32 | 4 | R | If data read are valid this fields value is 1, if not is 0. |
| 0x00010210 (66064) | Manufacturer ID | char | 32 | R | ID of Ultimo chip Manufacturer |
| 0x00010230 (66096) | Model ID | char[32] | 32 | R | ID of Ultimo chip Model |
| 0x00010250 (66128) | Software Version | uint32 | 4 | R | Software version of Ultimo chip |
| 0x00010254 (66132) | Software Build | uint32 | 4 | R | Software build of Ultimo chip |
| 0x00010258 (66136) | Firmware Version | uint32 | 4 | R | Firmware version of Ultimo chip |
| 0x0001025c (66140) | Firmware Build | uint32 | 4 | R | Firmware build of Ultimo chip |
| 0x00010260 (66144) | Cap Flags | uint32 | 4 | R | Cap Flags of Ultimo chip |
| 0x00010264 (66148) | Model Version | uint32 | 4 | R | Model Version of Ultimo chip |

# Audio Basic

This area contains the information about Audio Basic Settings

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00010300 (66304) | Time of Last Read | uint32 | 4 | R | The number of ticks when last read of this area has been done. |
| 0x00010304 (66308) | Time of Prev Read | uint32 | 4 | R | The number of ticks when previous read of this area has been done. |
| 0x00010308 (66312) | Time of Last Change | uint32 | 4 | R | The number of ticks when this area has changed last time. |
| 0x0001030c (66316) | Data is Valid | uint32 | 4 | R | If data read are valid this fields value is 1, if not is 0. |
| 0x00010310 (66320) | Status | uint32 | 4 | R | Check Audinate Documentation |
| 0x00010314 (66324) | Change Flags | uint8 | 1 | R | Check Audinate Documentation |
| 0x00010316 (66326) | Default Encoding | uint16 | 2 | R | Check Audinate Documentation |
| 0x00010318 (66328) | Rx Channels | uint16 | 2 | R | Number of Receiving Channels |
| 0x0001031a (66330) | Tx Channels | uint16 | 2 | R | Number of Trasmitting Channels |
| 0x0001031c (66332) | Cap Flags | uint32 | 4 | R | Check Audinate Documentation |
| 0x00010320 (66336) | Default Sample Rate | uint32 | 4 | R | Check Audinate Documentation |

# Routing RX Channels Settings

This area contains the information about Routing RX Channels Settings

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| RX Channel 1 Settings | 0x00010400 | 0x000104a8 | RX Channel 1 Settings |
| RX Channel 2 Settings | 0x000104a8 | 0x00010550 | RX Channel 2 Settings |
| RX Channel 3 Settings | 0x00010550 | 0x000105f8 | RX Channel 3 Settings |
| RX Channel 4 Settings | 0x000105f8 | 0x000106a0 | RX Channel 4 Settings |

# RX Channel 1 Settings

RX Channel 1 Settings

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00010400 (66560) | Time of Last Read | uint32 | 4 | R | The number of ticks when last read of this area has been done. |
| 0x00010404 (66564) | Time of Prev Read | uint32 | 4 | R | The number of ticks when previous read of this area has been done. |
| 0x00010408 (66568) | Time of Last Change | uint32 | 4 | R | The number of ticks when this area has changed last time. |
| 0x0001040c (66572) | Data is Valid | uint32 | 4 | R | If data read are valid this fields value is 1, if not is 0. |
| 0x00010410 (66576) | Channel Name | char[32] | 32 | R | Null-terminated default Rx channel 1 name string. |
| 0x00010430 (66608) | Encoding | uint16 | 2 | R | Audio encoding used by this Rx channel 1. |
| 0x00010434 (66612) | Sample Rate | uint32 | 4 | R | Audio sample rate for Rx channel 1. |
| 0x00010438 (66616) | PCM Map | uint16 | 2 | R | Bitmask of supported PCM encodings, in bytes (eg 0x4 => 24 bits). |
| 0x0001043a (66618) | Channel Flags | uint16 | 2 | R | Channel 1 flags. |
| 0x0001043c (66620) | Channel Flags Mask | uint16 | 2 | R | Bitwise OR'd mask which specify which channel_flags are valid. |
| 0x0001043e (66622) | Channel Label | char[32] | 32 | R | Null-terminated Rx channel 1 label string. |
| 0x0001045e (66654) | Status | uint16 | 2 | R | Subscription status of this Rx channel 1. |
| 0x00010460 (66656) | Availability | uint8 | 1 | R | A non-zero value indicates that channel 1 is available to receive audio |
| 0x00010461 (66657) | Active | uint8 | 1 | R | A non-zero value indicates that channel 1 is active |
| 0x00010462 (66658) | Subscribed Channel | char[32] | 32 | R | Null-terminated string of the Tx channel that Rx channel 1 is subscribed to. If no subscription is active then this field is NULL. |
| 0x00010482 (66690) | Subscribe Device | char[32] | 32 | R | Null-terminated string of the Tx device that Rx channel 1 is subscribed to. If no subscription is active then this field is NULL. |
| 0x000104a2 (66722) | Flow ID | uint16 | 2 | R | Flow ID associated with this Rx channel, only valid if channel 1 is subscribed. |
| 0x000104a4 (66724) | Slot ID | uint16 | 2 | R | Slot ID associated this this Rx channel 1. |

# RX Channel 2 Settings

RX Channel 2 Settings

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x000104a8 (66728) | Time of Last Read | uint32 | 4 | R | The number of ticks when last read of this area has been done. |
| 0x000104ac (66732) | Time of Prev Read | uint32 | 4 | R | The number of ticks when previous read of this area has been done. |
| 0x000104b0 (66736) | Time of Last Change | uint32 | 4 | R | The number of ticks when this area has changed last time. |
| 0x000104b4 (66740) | Data is Valid | uint32 | 4 | R | If data read are valid this fields value is 1, if not is 0. |
| 0x000104b8 (66744) | Channel Name | char[32] | 32 | R | Null-terminated default Rx channel 1 name string. |
| 0x000104d8 (66776) | Encoding | uint16 | 2 | R | Audio encoding used by this Rx channel 1. |
| 0x000104dc (66780) | Sample Rate | uint32 | 4 | R | Audio sample rate for Rx channel 1. |
| 0x000104e0 (66784) | PCM Map | uint16 | 2 | R | Bitmask of supported PCM encodings, in bytes (eg 0x4 => 24 bits). |
| 0x000104e2 (66786) | Channel Flags | uint16 | 2 | R | Channel 1 flags. |
| 0x000104e4 (66788) | Channel Flags Mask | uint16 | 2 | R | Bitwise OR'd mask which specify which channel_flags are valid. |
| 0x000104e6 (66790) | Channel Label | char[32] | 32 | R | Null-terminated Rx channel 1 label string. |
| 0x00010506 (66822) | Status | uint16 | 2 | R | Subscription status of this Rx channel 1. |
| 0x00010508 (66824) | Availability | uint8 | 1 | R | A non-zero value indicates that channel 1 is available to receive audio |
| 0x00010509 (66825) | Active | uint8 | 1 | R | A non-zero value indicates that channel 1 is active |
| 0x0001050a (66826) | Subscribed Channel | char[32] | 32 | R | Null-terminated string of the Tx channel that Rx channel 1 is subscribed to. If no subscription is active then this field is NULL. |
| 0x0001052a (66858) | Subscribe Device | char[32] | 32 | R | Null-terminated string of the Tx device that Rx channel 1 is subscribed to. If no subscription is active then this field is NULL. |
| 0x0001054a (66890) | Flow ID | uint16 | 2 | R | Flow ID associated with this Rx channel, only valid if channel 1 is subscribed. |
| 0x0001054c (66892) | Slot ID | uint16 | 2 | R | Slot ID associated this this Rx channel 1. |

# RX Channel 3 Settings

RX Channel 3 Settings

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00010550 (66896) | Time of Last Read | uint32 | 4 | R | The number of ticks when last read of this area has been done. |
| 0x00010554 (66900) | Time of Prev Read | uint32 | 4 | R | The number of ticks when previous read of this area has been done. |
| 0x00010558 (66904) | Time of Last Change | uint32 | 4 | R | The number of ticks when this area has changed last time. |
| 0x0001055c (66908) | Data is Valid | uint32 | 4 | R | If data read are valid this fields value is 1, if not is 0. |
| 0x00010560 (66912) | Channel Name | char[32] | 32 | R | Null-terminated default Rx channel 1 name string. |
| 0x00010580 (66944) | Encoding | uint16 | 2 | R | Audio encoding used by this Rx channel 1. |
| 0x00010584 (66948) | Sample Rate | uint32 | 4 | R | Audio sample rate for Rx channel 1. |
| 0x00010588 (66952) | PCM Map | uint16 | 2 | R | Bitmask of supported PCM encodings, in bytes (eg 0x4 => 24 bits). |
| 0x0001058a (66954) | Channel Flags | uint16 | 2 | R | Channel 1 flags. |
| 0x0001058c (66956) | Channel Flags Mask | uint16 | 2 | R | Bitwise OR'd mask which specify which channel_flags are valid. |
| 0x0001058e (66958) | Channel Label | char[32] | 32 | R | Null-terminated Rx channel 1 label string. |
| 0x000105ae (66990) | Status | uint16 | 2 | R | Subscription status of this Rx channel 1. |
| 0x000105b0 (66992) | Availability | uint8 | 1 | R | A non-zero value indicates that channel 1 is available to receive audio |
| 0x000105b1 (66993) | Active | uint8 | 1 | R | A non-zero value indicates that channel 1 is active |
| 0x000105b2 (66994) | Subscribed Channel | char[32] | 32 | R | Null-terminated string of the Tx channel that Rx channel 1 is subscribed to. If no subscription is active then this field is NULL. |
| 0x000105d2 (67026) | Subscribe Device | char[32] | 32 | R | Null-terminated string of the Tx device that Rx channel 1 is subscribed to. If no subscription is active then this field is NULL. |
| 0x000105f2 (67058) | Flow ID | uint16 | 2 | R | Flow ID associated with this Rx channel, only valid if channel 1 is subscribed. |
| 0x000105f4 (67060) | Slot ID | uint16 | 2 | R | Slot ID associated this this Rx channel 1. |

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# RX Channel 4 Settings

RX Channel 4 Settings

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x000105f8 (67064) | Time of Last Read | uint32 | 4 | R | The number of ticks when last read of this area has been done. |
| 0x000105fc (67068) | Time of Prev Read | uint32 | 4 | R | The number of ticks when previous read of this area has been done. |
| 0x00010600 (67072) | Time of Last Change | uint32 | 4 | R | The number of ticks when this area has changed last time. |
| 0x00010604 (67076) | Data is Valid | uint32 | 4 | R | If data read are valid this fields value is 1, if not is 0. |
| 0x00010608 (67080) | Channel Name | char[32] | 32 | R | Null-terminated default Rx channel 1 name string. |
| 0x00010628 (67112) | Encoding | uint16 | 2 | R | Audio encoding used by this Rx channel 1. |
| 0x0001062c (67116) | Sample Rate | uint32 | 4 | R | Audio sample rate for Rx channel 1. |
| 0x00010630 (67120) | PCM Map | uint16 | 2 | R | Bitmask of supported PCM encodings, in bytes (eg 0x4 => 24 bits). |
| 0x00010632 (67122) | Channel Flags | uint16 | 2 | R | Channel 1 flags. |
| 0x00010634 (67124) | Channel Flags Mask | uint16 | 2 | R | Bitwise OR'd mask which specify which channel_flags are valid. |
| 0x00010636 (67126) | Channel Label | char[32] | 32 | R | Null-terminated Rx channel 1 label string. |
| 0x00010656 (67158) | Status | uint16 | 2 | R | Subscription status of this Rx channel 1. |
| 0x00010658 (67160) | Availability | uint8 | 1 | R | A non-zero value indicates that channel 1 is available to receive audio |
| 0x00010659 (67161) | Active | uint8 | 1 | R | A non-zero value indicates that channel 1 is active |
| 0x0001065a (67162) | Subscribed Channel | char[32] | 32 | R | Null-terminated string of the Tx channel that Rx channel 1 is subscribed to. If no subscription is active then this field is NULL. |
| 0x0001067a (67194) | Subscribe Device | char[32] | 32 | R | Null-terminated string of the Tx device that Rx channel 1 is subscribed to. If no subscription is active then this field is NULL. |
| 0x0001069a (67226) | Flow ID | uint16 | 2 | R | Flow ID associated with this Rx channel, only valid if channel 1 is subscribed. |
| 0x0001069c (67228) | Slot ID | uint16 | 2 | R | Slot ID associated this this Rx channel 1. |

# Routing TX Channels Settings

This area contains the information about Routing TX Channels Settings

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| TX Channel 1 Settings | 0x00010800 | 0x00010860 | Tx Channel 1 Settings |
| TX Channel 2 Settings | 0x00010860 | 0x000108c0 | Tx Channel 2 Settings |
| TX Channel 3 Settings | 0x000108c0 | 0x00010920 | Tx Channel 3 Settings |
| TX Channel 4 Settings | 0x00010920 | 0x00010980 | Tx Channel 4 Settings |

# TX Channel 1 Settings

Tx Channel 1 Settings

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00010800 (67584) | Time of Last Read | uint32 | 4 | R | The number of ticks when last read of this area has been done. |
| 0x00010804 (67588) | Time of Prev Read | uint32 | 4 | R | The number of ticks when previous read of this area has been done. |
| 0x00010808 (67592) | Time of Last Change | uint32 | 4 | R | The number of ticks when this area has changed last time. |
| 0x0001080c (67596) | Data is Valid | uint32 | 4 | R | If data read are valid this fields value is 1, if not is 0. |
| 0x00010810 (67600) | Channel Name | char[32] | 32 | R | Null-terminated default Tx channel 1 name string. |
| 0x00010830 (67632) | Encoding | uint16 | 2 | R | Audio encoding used by this Tx channel 1. |
| 0x00010834 (67636) | Sample Rate | uint32 | 4 | R | Audio sample rate for Tx channel 1. |
| 0x00010838 (67640) | PCM Map | uint16 | 2 | R | Bitmask of supported PCM encodings, in bytes (eg 0x4 => 24 bits). |
| 0x0001083a (67642) | Channel Flags | uint16 | 2 | R | Channel 1 flags. |
| 0x0001083c (67644) | Channel Flags Mask | uint16 | 2 | R | Bitwise OR'd mask which specify which channel_flags are valid. |
| 0x0001083e (67646) | Channel Label | char[32] | 32 | R | Null-terminated Rx channel 1 label string. |

# TX Channel 2 Settings

Tx Channel 2 Settings

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x00010860 (67680) | Time of Last Read | uint32 | 4 | R | The number of ticks when last read of this area has been done. |
| 0x00010864 (67684) | Time of Prev Read | uint32 | 4 | R | The number of ticks when previous read of this area has been done. |
| 0x00010868 (67688) | Time of Last Change | uint32 | 4 | R | The number of ticks when this area has changed last time. |
| 0x0001086c (67692) | Data is Valid | uint32 | 4 | R | If data read are valid this fields value is 1, if not is 0. |
| 0x00010870 (67696) | Channel Name | char[32] | 32 | R | Null-terminated default Tx channel 1 name string. |
| 0x00010890 (67728) | Encoding | uint16 | 2 | R | Audio encoding used by this Tx channel 1. |
| 0x00010894 (67732) | Sample Rate | uint32 | 4 | R | Audio sample rate for Tx channel 1. |
| 0x00010898 (67736) | PCM Map | uint16 | 2 | R | Bitmask of supported PCM encodings, in bytes (eg 0x4 => 24 bits). |
| 0x0001089a (67738) | Channel Flags | uint16 | 2 | R | Channel 1 flags. |
| 0x0001089c (67740) | Channel Flags Mask | uint16 | 2 | R | Bitwise OR'd mask which specify which channel_flags are valid. |
| 0x0001089e (67742) | Channel Label | char[32] | 32 | R | Null-terminated Rx channel 1 label string. |

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# TX Channel 3 Settings

Tx Channel 3 Settings

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x000108c0 (67776) | Time of Last Read | uint32 | 4 | R | The number of ticks when last read of this area has been done. |
| 0x000108c4 (67780) | Time of Prev Read | uint32 | 4 | R | The number of ticks when previous read of this area has been done. |
| 0x000108c8 (67784) | Time of Last Change | uint32 | 4 | R | The number of ticks when this area has changed last time. |
| 0x000108cc (67788) | Data is Valid | uint32 | 4 | R | If data read are valid this fields value is 1, if not is 0. |
| 0x000108d0 (67792) | Channel Name | char[32] | 32 | R | Null-terminated default Tx channel 1 name string. |
| 0x000108f0 (67824) | Encoding | uint16 | 2 | R | Audio encoding used by this Tx channel 1. |
| 0x000108f4 (67828) | Sample Rate | uint32 | 4 | R | Audio sample rate for Tx channel 1. |
| 0x000108f8 (67832) | PCM Map | uint16 | 2 | R | Bitmask of supported PCM encodings, in bytes (eg 0x4 => 24 bits). |
| 0x000108fa (67834) | Channel Flags | uint16 | 2 | R | Channel 1 flags. |
| 0x000108fc (67836) | Channel Flags Mask | uint16 | 2 | R | Bitwise OR'd mask which specify which channel_flags are valid. |
| 0x000108fe (67838) | Channel Label | char[32] | 32 | R | Null-terminated Rx channel 1 label string. |

# TX Channel 4 Settings

Tx Channel 4 Settings

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00010920 (67872) | Time of Last Read | uint32 | 4 | R | The number of ticks when last read of this area has been done. |
| 0x00010924 (67876) | Time of Prev Read | uint32 | 4 | R | The number of ticks when previous read of this area has been done. |
| 0x00010928 (67880) | Time of Last Change | uint32 | 4 | R | The number of ticks when this area has changed last time. |
| 0x0001092c (67884) | Data is Valid | uint32 | 4 | R | If data read are valid this fields value is 1, if not is 0. |
| 0x00010930 (67888) | Channel Name | char[32] | 32 | R | Null-terminated default Tx channel 1 name string. |
| 0x00010950 (67920) | Encoding | uint16 | 2 | R | Audio encoding used by this Tx channel 1. |
| 0x00010954 (67924) | Sample Rate | uint32 | 4 | R | Audio sample rate for Tx channel 1. |
| 0x00010958 (67928) | PCM Map | uint16 | 2 | R | Bitmask of supported PCM encodings, in bytes (eg 0x4 => 24 bits). |
| 0x0001095a (67930) | Channel Flags | uint16 | 2 | R | Channel 1 flags. |
| 0x0001095c (67932) | Channel Flags Mask | uint16 | 2 | R | Bitwise OR'd mask which specify which channel_flags are valid. |
| 0x0001095e (67934) | Channel Label | char[32] | 32 | R | Null-terminated Rx channel 1 label string. |

# Device Identity

This area contains the information about Device Identity

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00010a00 (68096) | Time of Last Read | uint32 | 4 | R | The number of ticks when last read of this area has been done. |
| 0x00010a04 (68100) | Time of Prev Read | uint32 | 4 | R | The number of ticks when previous read of this area has been done. |
| 0x00010a08 (68104) | Time of Last Change | uint32 | 4 | R | The number of ticks when this area has changed last time. |
| 0x00010a0c (68108) | Data is Valid | uint32 | 4 | R | If data read are valid this fields value is 1, if not is 0. |
| 0x00010a10 (68112) | Status Flags | uint16 | 2 | R | Check for Audinate Documentation. |
| 0x00010a12 (68114) | Process ID | uint16 | 2 | R | Check for Audinate Documentation. |
| 0x00010a14 (68116) | Device ID | char[17] | 17 | R | Device ID of Ultimo Chip. |
| 0x00010a25 (68133) | Default Name | char[32] | 32 | R | Default Name of Ultimo Chip. |
| 0x00010a45 (68165) | Friendly Name | char[32] | 32 | R | Friendly Name of Ultimo Chip. |
| 0x00010a65 (68197) | Domain | char[32] | 32 | R | Domain of Ultimo Chip. |
| 0x00010a85 (68229) | Advertised Name | char[32] | 32 | R | Advertised Name of Ultimo Chip. |

# Device SRate

This area contains the information about Device SRate.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|

# Device AES67

This area contains the information about Device AES67.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|

# Device Routing Performance

This area contains the information about Device Routing Performance.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|

# Device Lock Unlock

This area contains the information about Device Lock Unlock.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|

# Device Basic Clock

This area contains the information about Device Basic Clock.

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|

# Device VLAN

This area contains the information about Device VLAN.

| BlockId | Start Address | End Address | Description |
|---------|---------------|-------------|-------------|
| VLAN Config | 0x00011000 | 0x00011018 | This area contains the information about VLAN Config. |
| Device VLAN ID 1 | 0x00011018 | 0x00011050 | Check for Audinate Documentation. |
| Device VLAN ID 2 | 0x00011050 | 0x00011088 | Check for Audinate Documentation. |
| Device VLAN ID 3 | 0x00011088 | 0x000110c0 | Check for Audinate Documentation. |
| Device VLAN ID 4 | 0x000110c0 | 0x000110f8 | Check for Audinate Documentation. |

# VLAN Config

This area contains the information about VLAN Config.

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x00011000 (69632) | Time of Last Read | uint32 | 4 | R | The number of ticks when last read of this area has been done. |
| 0x00011004 (69636) | Time of Prev Read | uint32 | 4 | R | The number of ticks when previous read of this area has been done. |
| 0x00011008 (69640) | Time of Last Change | uint32 | 4 | R | The number of ticks when this area has changed last time. |
| 0x0001100c (69644) | Data is Valid | uint32 | 4 | R | If data read are valid this fields value is 1, if not is 0. |
| 0x00011010 (69648) | VLAN Max Num | uint8 | 1 | R | Check for Audinate Documentation. |
| 0x00011011 (69649) | VLAN Num | uint8 | 1 | R | Check for Audinate Documentation. |
| 0x00011012 (69650) | VLAN Current ID | uint8 | 1 | R | Possible values are: 1 for switched, 2 for split. |
| 0x00011013 (69651) | VLAN Reboot ID | uint8 | 1 | R | Check for Audinate Documentation. |
| 0x00011014 (69652) | VLAN Config Port Mask | uint16 | 2 | R | Check for Audinate Documentation. |

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# Device VLAN ID 1

Check for Audinate Documentation.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00011018 (69656) | VLAN ID | uint32 | 4 | R | Check for Audinate Documentation. |
| 0x0001101c (69660) | VLAN Primary Bitmap | uint32 | 4 | R | Check for Audinate Documentation. |
| 0x00011020 (69664) | VLAN Secondary Bitmap | uint32 | 4 | R | Check for Audinate Documentation. |
| 0x00011024 (69668) | VLAN User 2 Bitmap | uint32 | 4 | R | Check for Audinate Documentation. |
| 0x00011028 (69672) | VLAN User 3 Bitmap | uint32 | 4 | R | Check for Audinate Documentation. |
| 0x0001102c (69676) | VLAN Name String | char[33] | 33 | R | Check for Audinate Documentation. |

# Device VLAN ID 2

Check for Audinate Documentation.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00011050 (69712) | VLAN ID | uint32 | 4 | R | Check for Audinate Documentation. |
| 0x00011054 (69716) | VLAN Primary Bitmap | uint32 | 4 | R | Check for Audinate Documentation. |
| 0x00011058 (69720) | VLAN Secondary Bitmap | uint32 | 4 | R | Check for Audinate Documentation. |
| 0x0001105c (69724) | VLAN User 2 Bitmap | uint32 | 4 | R | Check for Audinate Documentation. |
| 0x00011060 (69728) | VLAN User 3 Bitmap | uint32 | 4 | R | Check for Audinate Documentation. |
| 0x00011064 (69732) | VLAN Name String | char[33] | 33 | R | Check for Audinate Documentation. |

# Device VLAN ID 3

Check for Audinate Documentation.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00011088 (69768) | VLAN ID | uint32 | 4 | R | Check for Audinate Documentation. |
| 0x0001108c (69772) | VLAN Primary Bitmap | uint32 | 4 | R | Check for Audinate Documentation. |
| 0x00011090 (69776) | VLAN Secondary Bitmap | uint32 | 4 | R | Check for Audinate Documentation. |
| 0x00011094 (69780) | VLAN User 2 Bitmap | uint32 | 4 | R | Check for Audinate Documentation. |
| 0x00011098 (69784) | VLAN User 3 Bitmap | uint32 | 4 | R | Check for Audinate Documentation. |
| 0x0001109c (69788) | VLAN Name String | char[33] | 33 | R | Check for Audinate Documentation. |

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# Device VLAN ID 4

Check for Audinate Documentation.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x000110c0 (69824) | VLAN ID | uint32 | 4 | R | Check for Audinate Documentation. |
| 0x000110c4 (69828) | VLAN Primary Bitmap | uint32 | 4 | R | Check for Audinate Documentation. |
| 0x000110c8 (69832) | VLAN Secondary Bitmap | uint32 | 4 | R | Check for Audinate Documentation. |
| 0x000110cc (69836) | VLAN User 2 Bitmap | uint32 | 4 | R | Check for Audinate Documentation. |
| 0x000110d0 (69840) | VLAN User 3 Bitmap | uint32 | 4 | R | Check for Audinate Documentation. |
| 0x000110d4 (69844) | VLAN Name String | char[33] | 33 | R | Check for Audinate Documentation. |

# Device Switch Status

This area contains the information about Device Switch Status.

| BlockId | Start Address | End Address | Description |
|---|---|---|---|
| Switch Ports | 0x00011200 | 0x00011214 | This area contains the information about Switch Status Ports. |
| Switch Ports Status 1 | 0x00011214 | 0x00011220 | Check for Audinate Documentation. |
| Switch Ports Status 2 | 0x00011220 | 0x0001122c | Check for Audinate Documentation. |

# Switch Ports

This area contains the information about Switch Status Ports.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00011200 (70144) | Time of Last Read | uint32 | 4 | R | The number of ticks when last read of this area has been done. |
| 0x00011204 (70148) | Time of Prev Read | uint32 | 4 | R | The number of ticks when previous read of this area has been done. |
| 0x00011208 (70152) | Time of Last Change | uint32 | 4 | R | The number of ticks when this area has changed last time. |
| 0x0001120c (70156) | Data is Valid | uint32 | 4 | R | If data read are valid this fields value is 1, if not is 0. |
| 0x00011210 (70160) | Switch Status Enabled Ports Values | uint16 | 2 | R | Check for Audinate Documentation. |
| 0x00011212 (70162) | Switch Status Ports Number | uint8 | 1 | R | Check for Audinate Documentation. |

# Switch Ports Status 1

Check for Audinate Documentation.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00011214 (70164) | Valid Flags | uint16 | 2 | R | Valid flags bitmask indicating which fields in this messages are valid. |
| 0x00011216 (70166) | Link Speed | uint16 | 2 | R | Link speed in Mbps. |
| 0x00011218 (70168) | Port Number | uint8 | 1 | R | Port number. |
| 0x00011219 (70169) | Port Mode | uint8 | 1 | R | Port mode. |
| 0x0001121a (70170) | Link Flags Mask | uint8 | 1 | R | Bitmask of which bits in the Link Flags are valid. |
| 0x0001121b (70171) | Link Flags | uint8 | 1 | R | Bitmask of link flags. |
| 0x0001121c (70172) | Error Count | uint32 | 4 | R | Error count - RX errors, FCS errors, etc. |

# Switch Ports Status 2

Check for Audinate Documentation.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00011220 (70176) | Valid Flags | uint16 | 2 | R | Valid flags bitmask indicating which fields in this messages are valid. |
| 0x00011222 (70178) | Link Speed | uint16 | 2 | R | Link speed in Mbps. |
| 0x00011224 (70180) | Port Number | uint8 | 1 | R | Port number. |
| 0x00011225 (70181) | Port Mode | uint8 | 1 | R | Port mode. |
| 0x00011226 (70182) | Link Flags Mask | uint8 | 1 | R | Bitmask of which bits in the Link Flags are valid. |
| 0x00011227 (70183) | Link Flags | uint8 | 1 | R | Bitmask of link flags. |
| 0x00011228 (70184) | Error Count | uint32 | 4 | R | Error count - RX errors, FCS errors, etc. |

# Set Dante Network

This command sets the IP, Netmask and Gateway for the UXT chip.
To set DHCP, message field must be set to 0.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00012000 (73728) | IPAddress | uint8[4] | 4 | W | Is the IP address. Is expressed in big endian. |
| 0x00012004 (73732) | NetMask | uint8[4] | 4 | W | Is the NetMask address. Is expressed in big endian. |
| 0x00012008 (73736) | DefaultGW | uint8[4] | 4 | W | Is the default gateway address. Is expressed in big endian. |

# Set Dante ID

This command sets the UXT chip friendly name.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00012010 (73744) | Dante Module ID string | char[32] | 32 | W | ID string of UXT chip. This array must be a null-terminated string, so it can contain up to 31 characters. |

# Set Dante Tx Label

This command sets the label for a specific Tx channel.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00012030 (73776) | Dante Tx channel number | uint16 | 2 | W | Tx channel number, 0-based [0 -> 3]. |
| 0x00012032 (73778) | Dante Tx channel name string | char[32] | 32 | W | Tx channel name string. This array must be a null-terminated string, so it can contain up to 31 characters. |

# Dante Tapping

This command links a Rx channel to the specified Tx channel of a Tx device.

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00012060 (73824) | Dante Rx channel number | uint16 | 2 | W | Rx channel number, 0-based [0 -> 3]. |
| 0x00012062 (73826) | Dante Tx channel name string | char[32] | 32 | W | Tx channel name string. This array must be a null-terminated string, so it can contain up to 31 characters. |
| 0x00012082 (73858) | Dante Tx device name string | char[32] | 32 | W | Tx device name string. This array must be a null-terminated string, so it can contain up to 31 characters. |

# Dante Reboot

This command reboots the UXT chip.

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x000120b0 (73904) | Dante Reboot | uint8 | 1 | W | If set to `0xAC` reboots the UXT chip. |

# OEM Spare Area

Empty Spare Area dedicated to OEM.

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x00013000 (77824) | Spare Area | char[256] | 256 | R\W | Empty spare area for OEM. |

# Blink

The blink command

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x00100000 (1048576) | Blink | uint8 | 1 | W | If set to `1` starts blinking, if set to `0` stops blinking |

# System Reboot

The system reboot command

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x00100001 (1048577) | System Reboot | uint8 | 1 | W | If set to `0xAC` reboots the device |

# Load Default Parameters

Equivalent to an hardware Hard Reset

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x00100002 (1048578) | Load Default Parameters | uint8 | 1 | W | If set to `0x01` load the default parameters of preset |

# Firmware Area

This area contains the firmware. The max size for firmware is 1048576

| Offset | Name | Type | Dim | R \ W | Description |
|--------|------|------|-----|-------|-------------|
| 0x00700000 (7340032) | Firmware | uint8[] | 1048576 | W | Reads the TempTrasf |

# Firmware Start

This area contains the new firmware information, use this to verify the firmware before flash it

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00900000 (9437184) | Firmware CRC | uint16 | 2 | W | The firmware crc |
| 0x00900002 (9437186) | Firmware size | uint32 | 4 | W | The firmware size |

# Firmware Flash Erase

This will start the upgrade firmware

| Offset | Name | Type | Dim | R \ W | Description |
|---|---|---|---|---|---|
| 0x00900010 (9437200) | Start upgrade | uint8 | 1 | W | Starts the firmware upgrade |