The Embedded I/O Company

TEWS TECHNOLOGIES

TAMC532-TM

32x Analog Input MTCA.4 µRTM

Version 1.0

TAMC532-TM-20R User Manual Addendum

Issue 1.0.0

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TAMC532-TM-20R

MTCA.4 Class A2.1 µRTM, Mid-Size front panel, 32 x differential inputs, selectable gain, baseline shifter, DC-coupled inputs

Style Conventions

Hexadecimal characters are specified with prefix 0x, i.e. 0x029E (that means hexadecimal value 029E).

For signals on hardware products, an ‚Active Low' is represented by the signal name with # following, i.e. IP_RESET#.

Access terms are described as:

W	Write Only
R	Read Only
R/W	Read/Write
R/C	Read/Clear
R/S	Read/Set

Issue	Description	Date
1.0.0	Initial Issue	26.06.2018

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1 Product Description

This Addendum contains only information that differs from or is missing in the original TAMC532-TM User Manual. For any information not listed in this addendum, please refer to the TAMC532-TM User Manual. In case of doubt, this addendum takes precedence over the TAMC532-TM User Manual.

1.1 TAMC532-TM-20R

The TAMC532-TM-20R is a MTCA.4 compliant Micro Rear Transition Module for the TAMC532 and based on the TAMC532-TM-10R.

Eight RJ45 connectors are used as input connectors for the 32 differential analog inputs of the TAMC532-TM.

Each of the 32 differential analog inputs is connected to its own filter block.

The filter block consists of an input Buffer with programmable gain and an output buffer with adjustable baseline shift.

The baseline shift is useful if the input signal is always positive (or negative). It allows to increase the gain and to make better use of the ADC input voltage range.

All gain and baseline shift settings are common for groups of 8 inputs.

The output of the filter block is accessible by the AMC via Zone 3.

A Clock input is available in the TAMC532-TM front panel as well. A coaxial connector is used to feed the single-ended signal into the TAMC532-TM. After a single-ended to LVDS conversion, the signal is connected to Zone 3, RTM_CLK0.

Zone 3 pin assignment and the µRTM management implementation are MTCA.4 compliant and comply with Zone 3 Classification Recommendation according to Class A2.1.

2 IPMI support

2.1 FRU Information

2.1.1 Board Info Area

Product Information	Value
Version	1
Language Code	0x00 - English
Manufacturer date/time	determined at manufacturing
Board manufacturer	TEWS TECHNOLOGIES GmbH
Board product name	TAMC532-TM
Board serial number	determined at manufacturing (see board label)
Board part number	TAMC532-TM-xxR -xx = -20

Table 2-1 : Board Info Area

2.1.2 Product Info Area

Product Information	Value
Version	1
Language Code	0x00 - English
Product manufacturer	TEWS TECHNOLOGIES GmbH
Product name	TAMC532-TM
Board part/model number	TAMC532-TM-xxR -xx = -20
Product version	V1.0 Rev. A (see board label)
Product serial number	determined at manufacturing (see board label)
Asset tag	= Product serial Number

Table 2-2 : Product Info Area

3 Functional Description

3.1 Analog Input Channel

The Analog input Channel of the TAMC532-TM-20R differs from the -10R in the following:

- Pole-Zero Cancellation is missing
- Differentiator is missing
- 1st second order Low Pass Filter are missing
- 2nd second order Low Pass Filter are missing

Due to the missing Differentiator, the TAMC532-TM-20R provides DC-coupled analog input paths.

3.2 Digital Control (RCC)

Any write to RCC registers related to missing functions will have no effect on the TAMC532-TM-20R. Reading these registers may return random data.

Affected registers are

- Pole Zero Cancellation for Channel [0:31] Registers
- Filter Frequency Select Register