

# TXMC897 2 Channel 10GBASE-T and 2 Channel SFP+ 10 Gigabit Ethernet



TXMC897-10R



**TXMC897-20R** 

#### **Application Information**

The TXMC897 is a Switched Mezzanine Card (XMC) compatible module providing a two channel 100Base-TX / 1000Base-T / 2.5GBase-T / 5GBase-T / 10GBase-T Ethernet and a two channel Enhanced Small Form Factor Pluggable (SFP+) 10 Gigabit Ethernet interface.

The XMC-Connector P15 provides access to the Intel X710-TM4/AT2 quad/dual port 10GbE controller via an x8/x4 PCIe link. Two Ethernet interfaces support 100, 1000 Mbit/s and 2.5, 5, 10 Gbit/s transmission rates and the two SFP+ Cages accept various SFP and SFP+ transceiver modules. These two SFP+ hosts are connected to the Ethernet Controller's SFI Interfaces.

The following transceiver modules have been successfully tested with the TXMC897-20R:

 Intel XDACBL1M (SFP+ Direct Attach Twinaxial Cable)

- Finisar FCBG110SD1C01 (SFP+ SFPwire Active Optical Cable)
- Intel E10GSFPSR (SFP+ 10GBase-SR/SW or 1000Base-SX)
- Finisar FTLX8571D3BCV (SFP+ 10GBase-SR/SW or 1000Base-SX)
- Intel E10GSFPLR (SFP+ 10GBase-LR/LW or 1000Base-LX)
- Finisar FTLX1471D3BCV (SFP+ 10GBase-LR/LW or 1000Base-LX)
- 10Gtek ASF-10G-T (SFP+ 10GBase-T)
- Finisar FCLF8522P2BTL (SFP 1000Base-T)

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#### **TEWS Technologies GmbH**

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### The Embedded I/O Company

All compatible transceiver modules and replacements of the tested modules will also work properly with the TXMC897. For preconfigured variants of the hardware module containing transceiver modules, please contact TEWS.

The controller is equipped with a 64 Mbit Serial Flash to support PXE and iSCSI boot and LEDs indicate the different network activities.

The four/two Ethernet interfaces of the TXMC897 are capable of performing an auto negotiation algorithm which allows both link-partners to determine the best link-parameters. The TXMC897 supports IEEE 1588/802.1AS Precision Time Protocol (PTP).

The TXMC897-10R provides two 10GBase-T Ethernet interfaces via front panel RJ45 connectors.

The TXMC897-20R provides two 10GBase-T Ethernet interfaces via front panel RJ45 connectors and two 10 Gigabit Ethernet interfaces via front panel SFP+ connectors.

#### **Software Support:**

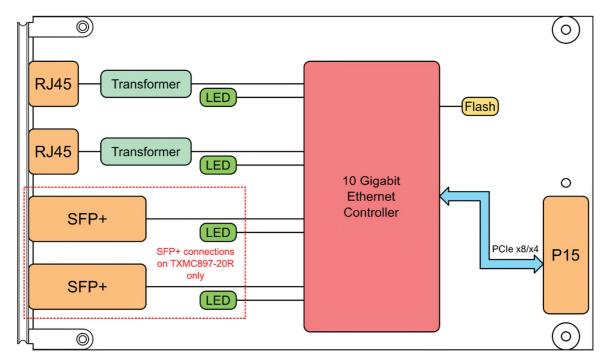
- Software support for Intel X710-TM4/AT2 at www.intel.com
- For operating systems not supported by Intel, please contact TEWS.

#### **Technical Information**

- Form Factor: Short single-width XMC module conforming to ANSI/VITA 42.0
  - O Board size: 124 mm x 74 mm
- x8/x4 PCI Express 3.0 compliant interface conforming to ANSI/VITA 42.3
- IPMI resource: FRU hardware definition information stored in on-board EEPROM
- Quad/dual port Intel X710-TM4/AT2 10 Gigabit Ethernet controller
- O Two RJ45 connectors
  - O 10GBase-T
  - O NBase-T
  - O 1000Base-T
  - O 100Base-TX

- O Two SFP+ Cages
  - O 10GBase-CU (SFP+ Direct Attach, twinax)
  - O SFPwire SFP+ Active Optical Cable
  - O 10GBase-SR/SW / 1000Base-SX
  - O 10GBase-LR/LW / 1000Base-LX
  - O 10GBase-T
  - O 1000Base-T
- O IEEE 1588/802.1AS Precision Time Protocol (PTP)
- 64 Mbit serial flash storing configuration data and providing memory for Boot ROM for all channels
- O Operating temperature 0°C to +55°C
- O MTBF (MIL-HDBK217F/FN2 G<sub>B</sub> 20°C) TXMC897-10R: 404000 h

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## The Embedded I/O Company

#### **Order Information**

#### **RoHS Compliant**

TXMC897-10R 2 Channel 10GBASE-T Ethernet; RJ45 Front I/O

TXMC897-20R 2 Channel 10GBASE-T and 2 Channel SFP+ 10 Gigabit Ethernet; RJ45 and SFP+ Front I/O

For the availability of non-RoHS compliant (leaded solder) products please contact TEWS.