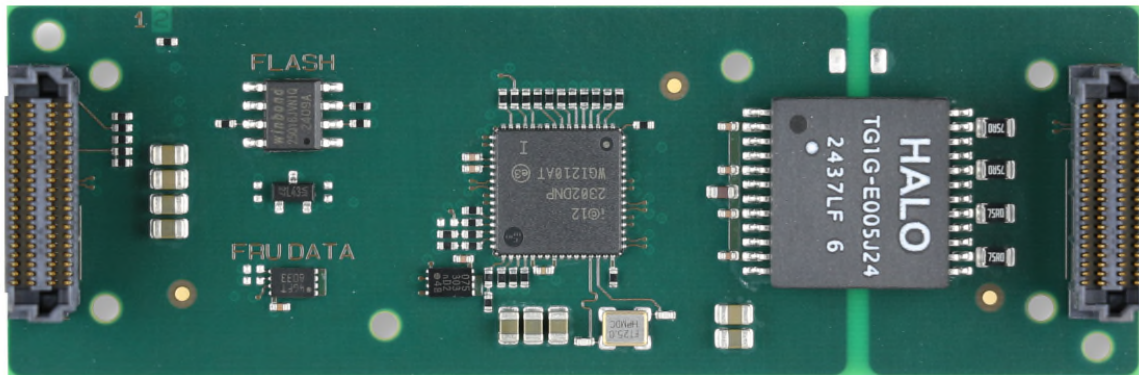


TQMC800 1 Channel 1000BASE-T Ethernet



TQMC800-10R

Application Information

The TQMC800 is a VITA 93.0 Small Form Factor Mezzanine Card (QMC) compatible module providing a one channel 10Base-T / 100Base-TX / 1000Base-T Ethernet interface.

The Intel I210IT Gigabit Ethernet Controller is accessible via PCIe. The Ethernet interface supports 10, 100 and 1000 Mbit/s transmission rates and is equipped with a 16 Mbit Serial Flash to support PXE and iSCSI boot.

The Ethernet interface of the TQMC800 is capable of performing an auto negotiation algorithm which allows both link-partners to determine the best link-parameters. The TQMC800 supports IEEE 1588/802.1AS Precision Time Protocol (PTP) and IEEE 802.1Qav Audio/Video Bridging (AVB) traffic shaping (with software extensions).

The TQMC800-10R routes the Ethernet port to the QMC I/O P12 connector.

The port is galvanically isolated from the Ethernet Controller and LEDs on the board indicate link/activity and link speed.

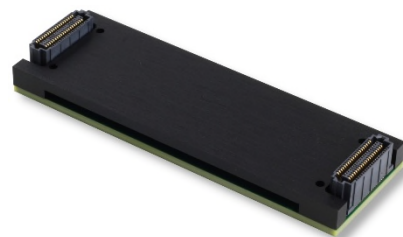
The TQMC800 has an I²C board temperature sensor to facilitate measurement of the board heat near the Ethernet Controller. The module is equipped with an I²C EEPROM storing IPMI Platform Management FRU Information and the EEPROM is write-protected by the QMC Connector's NVMMRO signal.

The module meets the requirements to operate in extended temperature range from -40°C to +85°C.

Software Support:

- Software support for Intel I210IT at www.intel.com
- For operating systems not supported by Intel, please contact TEWS Technologies.

The TQMC800 is available as air cooled and conduction cooled variant.

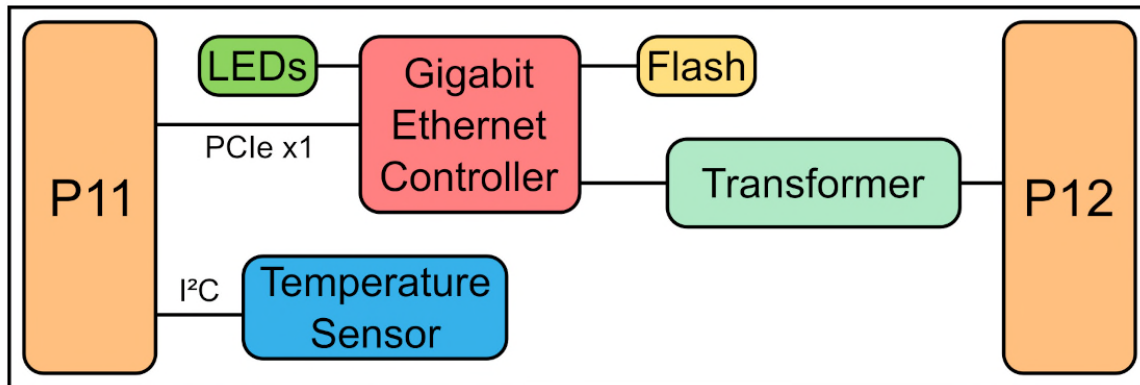


Conduction Cooled QMC

The Embedded I/O Company

Technical Information

- Form Factor: Standard Single QMC Module conforming to ANSI/VITA 93.0
 - Board size: 78 mm x 25.8 mm
- x1 PCI Express 2.1 compliant interface
- IPMI resource: FRU hardware definition information stored in on-board EEPROM
- Intel I210IT Gigabit Ethernet controller
- QMC I/O P12 connector
- 1000Base-T
- 100Base-TX
- 10Base-T
- IEEE 1588/802.1AS Precision Time Protocol (PTP)
 - V1 and V2 PTP frame format
- IEEE 802.1Qav Audio/Video Bridging (AVB) traffic shaper (with software extensions)
- 16 Mbit serial flash storing configuration data and providing memory for Boot ROM
- I²C board temperature sensor near Ethernet Controller
- Operating temperature -40°C to +85°C
- MTBF (MIL-HDBK217F/FN2 GB 20°C)
 - TQMC800-10R-A: 1759000 h
 - TQMC800-10R-H: 1759000 h



Block Diagram

Order Information

RoHS Compliant

TQMC800-10R-A 1 Channel 1000BASE-T Ethernet

TQMC800-10R-H 1 Channel 1000BASE-T Ethernet; Conduction Cooled

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

For the availability of conformal coated products please contact TEWS.