

TPMC385 Conduction Cooled, 4x 10/100/1000 Mbit/s Ethernet

Application Information

The TPMC385 is a conduction cooled PCI Mezzanine Card (PMC) compatible module providing a four channel Ethernet 10BASE-T / 100BASE-TX / 1000BASE-T interface.

A transparent 64 bit, up to 133 MHz PCI-X/PCI to PCIe Bridge and a PCIe Switch provide access to the Intel™ 82574IT Gigabit Ethernet controllers. Each Ethernet interface supports 10, 100 and 1000Mbit/s transmission rates for full duplex operation, and 10 and 100Mbit/s transmissions for half duplex operation, and is equipped with a 32 Kbit Serial EEPROM.

The four Ethernet interfaces of the TPMC385 are capable of performing an auto negotiation algorithm which allows both link-partners to find out the best link-parameters by themselves. The TPMC385 is widely user configurable via configuration and status register access over the PCI bus.

The TPMC385-10R routes all four 10/100/1000Mbit/s Ethernet ports to the PMC back I/O P14 connector.

All ports are galvanically isolated from the Ethernet controllers and LEDs on the board indicate the different network activities.

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

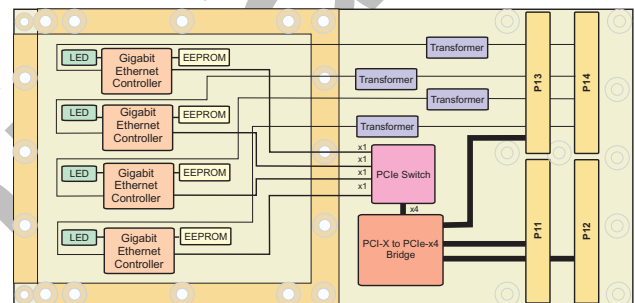
For First-Time-Buyers the engineering documentation TPMC385-ED is recommended. The engineering documentation includes TPMC385-DOC, schematics and data sheets of TPMC385.

Software Support:

- Software support for Intel™ 82574IT at www.intel.com
- For operating systems not supported by Intel™, please contact TEWS.

Technical Information

- Form Factor: Conduction cooled single-width 64 bit PMC module, no front panel
 - Board size: 143.75mm x 74mm
- PCI 3.0 (up to 66 MHz) and PCI-X 2.0a (up to 133 MHz) compliant interface
- 3.3V PCI signaling with 5V I/O tolerance
- 4 Intel™ 82574IT Gigabit Ethernet controllers
- 10Base-T / 100Base-TX / 1000Base-T
- Half or full-duplex operation
- For each interface: Configurable receive and transmit data FIFO, programmable in 1 KB increments
- Operating temperature -40°C to +85°C
- MTBF (MIL-HDBK217F/FN2 GB 20°C) TPMC385-10R: tbd



Order Information

RoHS Compliant

TPMC385-10R Conduction Cooled, Four channel 10/100/1000 Mbit/s Ethernet interface back I/O, extended temperature range

Documentation

TPMC385-DOC User Manual

TPMC385-ED Engineering documentation (TPMC385-DOC, Schematics, Assembly Drawing, Data Sheets)

Related Products

TPIM006 PIM I/O Module for Gigabit Ethernet PMCs