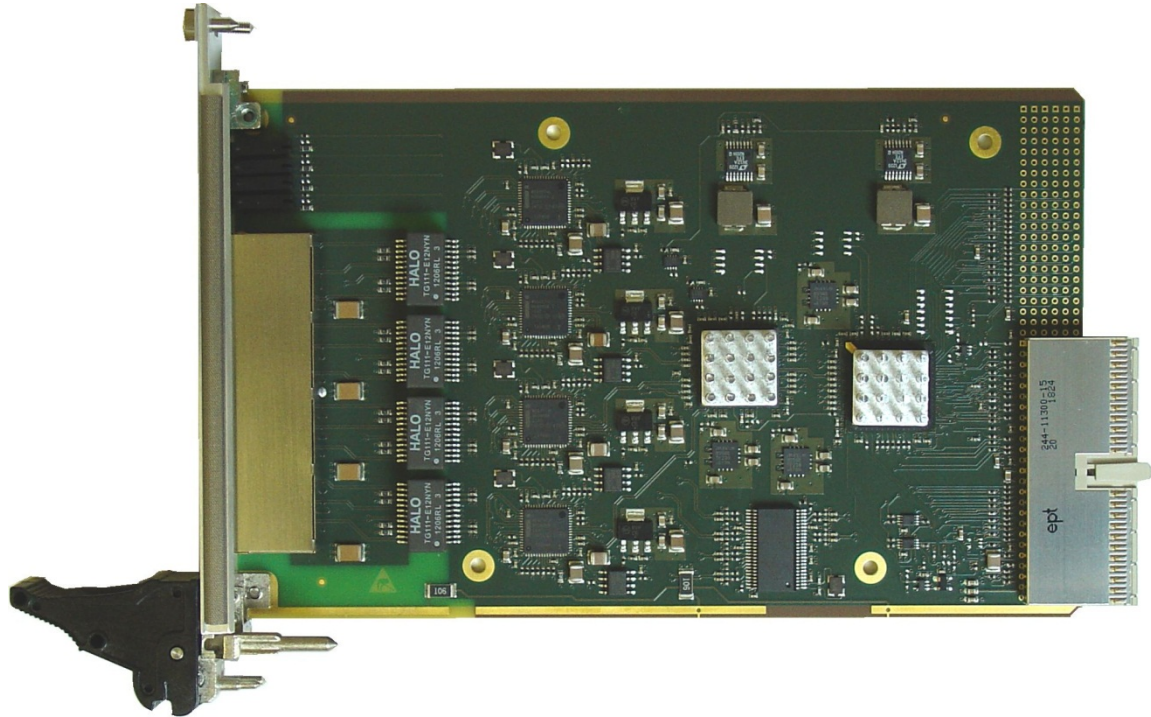


TCP885 Four Channel 10/100/1000 Mbit/s Ethernet



Application Information

The TCP885 is a 3U 32bit/64bit CompactPCI module providing a four channel Ethernet 10BASE-T / 100BASE-TX / 1000BASE-T interface.

The TCP885 is equipped with a transparent PCI/PCI-X to PCIe Bridge which is capable of performing data transfer with a bus width of up to 64 bit at bus frequencies of up to 133 MHz depending on the product order option and the system backplane configuration.

The Bridge and a PCIe Switch provide access to the Intel 82574IT Gigabit Ethernet controllers. Each Ethernet interface supports 10, 100 and 1000 Mbit/s transmission rates for full duplex operation, 10 and 100 Mbit/s transmissions for half duplex operation, and is equipped with a 32 Kbit Serial EEPROM.

The four front panel RJ45 connector Ethernet interfaces of the TCP885 are capable of performing an auto negotiation algorithm which allows both link-partners to find out the best link-parameters by themselves.

The TCP885 is widely user configurable via configuration and status register access over the CompactPCI bus. All ports are galvanically isolated from the Ethernet controllers and LEDs indicate network activities.

On the TCP885-10R only CompactPCI connector J1 is fitted which means that the module is limited to 32bit PCI bus width.

The TCP885-20R is additionally equipped with CompactPCI connector J2 which allows 64bit data transfer in a corresponding backplane system configuration.

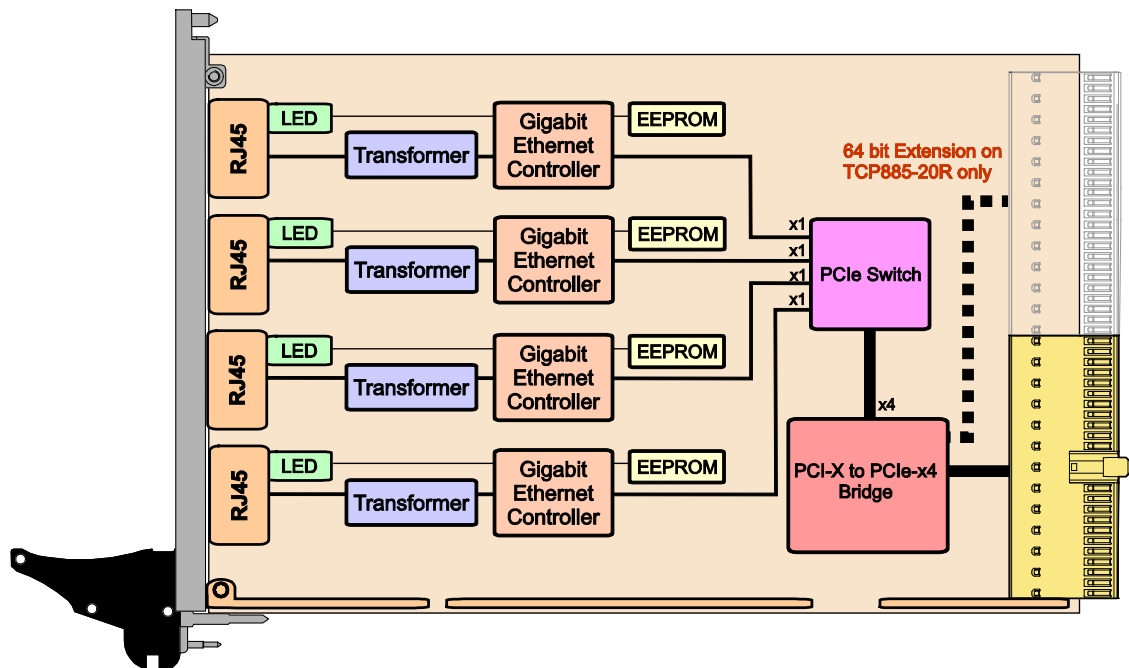
The module meets the requirements to operate in extended temperature range from -40° to +85°C.

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: 3U, 4HP 32/64 bit CompactPCI module conforming to PICMG 2.0 Revision 3.0
 - Board size: 100 mm x 160 mm
- 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
- RJ45 Ethernet Connectors
- 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)
 - TCP885-10R: 366000 h
 - TCP885-20R: 345000 h



Order Information

RoHS Compliant

- TCP885-10R** 4 Channel 10/100/1000BaseT Ethernet Interface, Intel 82574IT, RJ45, 32bit PCI on J1
TCP885-20R 4 Channel 10/100/1000BaseT Ethernet Interface, Intel 82574IT, RJ45, 64bit PCI on J1/J2

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

Documentation

- TCP885-DOC** User Manual