EM TRUST
computers you can trust

ICP-ETH

Dual or Quad Port Industrial-Grade Fast Ethernet Controller

APPLICATIONS

Ethernet is a networking standard that has been around in its various topologies for more than 30 years.

Typical application areas include:

- ▶ High Availability Systems
- ▶ Redundant Networking
- ▶ Industrial Router
- ▶ Gateway
- ▶ Industrial Ethernet Environments

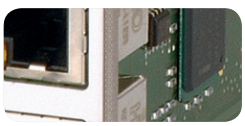
ICP-ETH

FEATURES

- ▶ Dual or quad Fast Ethernet ports
- ▶ Built-in physical layer interface unit
- ▶ IEEE 802.3u auto-negotiation support
- ▶ Collision detection
- ▶ Link detection
- ▶ Auto MDI, MDI-X crossover at all speeds
- ▶ Auto-detection CSMA/DC controller
- ▶ Up to 800 Mb/s data transfer rate
- ▶ Universal V I/O
- ▶ 3U, 4HP CompactPCI format

BENEFITS

- ▶ Scalability to suit the application
- ▶ Low power consumption even at full load
- ▶ Suitable for extended operational temperatures
- ▶ Designed for zero downtime applications
- ▶ Suitable for use in redundant architectures
- ▶ Replaces up to four single-port Fast Ethernet NICs (Network Interface Controller)
- ▶ Long-term product availability
- ▶ Superior software compatibility
- ▶ Open standard architecture



ICP-ETH

OVERVIEW

The ICP-ETH is built around the standard Intel 82551IT controller with a built-in Physical Layer Interface Unit that supports auto-negotiation, collision detection, and link detection.

The controller board has been designed for zero downtime tolerant applications where space is at a premium such as in the industrial automation, transportation, server, and telecommunications markets.

SPECIFICATION SUMMARY

- ▶ Up to 4x Intel 82551IT
- ▶ Up to 800 Mb/s
- ▶ Standard CAT5 cabling
- ▶ IEEE 802.3u auto negotiation support
- ▶ 3W power consumption
- ▶ Extended operational temperature

SPECIFICATIONS

CONTROLLER

Up to 4x 82551IT Fast Ethernet

INTERFACE

Two/four RJ45 with Activity/ Link status LEDs
M12 as an option
(2-port only!)

DATA TRANSFER

Combined data rate up to 800 Mb/s
full-duplex, or 400 Mb/s half-duplex

COMPACT PCI

- PCI 32-Bit, 33 MHz
- DMA bus master
- PCI-to-PCI bridge
- Universal V I/O

CABLE TYPE

Category 5/6, UTP (Unshielded Twisted Pair) or STP (Shielded Twisted Pair), length up to 100m maximum

COMPLIANCE

IEEE 802.3, PICMG 2.0 R3.0

POWER

3W (Max.) @ 100 Mbit full-duplex

FEATURES

- IEEE 802.3u auto negotiation support
- Auto MDI, MDI-X crossover at all speeds
- Polarity, MDI-X, and cable length detection
- Improved bit error rate per formance
- IEEE 802.3x 100BaseTx flow control support

MASS

130g (fully populated)

SOFTWARE SUPPORT

The EMTrust driver software supports the widely-used industrial Windows XP (Embedded) operating system. The SuSe 10.0 distribution, for example, already has this level of support built into it. Additional support is therefore not necessary.

DIMENSIONS

3U (100x160 mm) x 4HP

CLIMATIC CONDITIONS

- 0°C to +70°C (standard)
- -40°C to +85°C (extended)
- -40°C to +85°C (storage)
- Humidity 5% to 95% (non-condensing) @ 40°C

ORDERING INFORMATION

PRODUCT	DESCRIPTION
ICP-ETH-02	Two port 3U CompactPCI Fast Ethernet board based on the Intel 82551IT controller for high-availability industrial systems
ICP-ETH-04	As above, but with four independent Fast Ethernet ports based on the Intel 825551IT controller
ICP-ETH-M12-0	Two port 3U CompactPCI Fast Ethernet board with twin front-panel M12 interfaces
	Note: The ICP-ETH is available for extended operational temperatures. Please contact EMTrust for further information

EM TRUST
computers you can trust

www.emtrust.de

EMTrust GmbH
Gewerbering 1
85258 Weichs
Germany

Tel.: +49 8136 80 677-800
Fax: +49 8136 80 677-809
sales@emtrust.de