# *TRIGET*

# Gigabit Ethernet Controller PC/104-Plus Modules

## General Description

The TRIGET-Family consists of highly integrated, flexible and robust PC/104-Plus compliant Ethernet modules for industrial use. With a single PC/104-Plus module a system can be expanded with up to three Gigabit Ethernet controllers! Through the use of a PCI to PCI bridge the TRIGET requires only one slot on a PC/104-Plus stack. Therefore the stack still can be expanded by up to three other PC/104-Plus cards.

To match the different system requirements various interfaces and mechanical versions are offered. Chose between RJ45 or 2mm lockable headers as well as two mechanical sizes.

The TRIGET works on 5V and 3.3V PCI host boards. Further it supports up to 66MHz PCI operation.
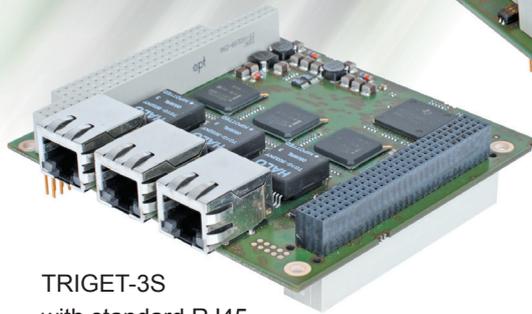
## TRIGET specialties

- Up to three Gigabit Ethernet controllers
- Only one PC/104-Plus Slot is used
- Status LEDs onboard
- Ethernet over RJ45 or 2mm lockable headers
- 33MHz/66MHz PCI operation
- Single 5V power supply
- 5V tolerant 3.3V PCI signaling
- Long-term available solution

## These features make

the TRIGET ideally suited for network applications that require many independent high-speed interfaces. Through the robust and flexible design the products can be well used in any embedded system.
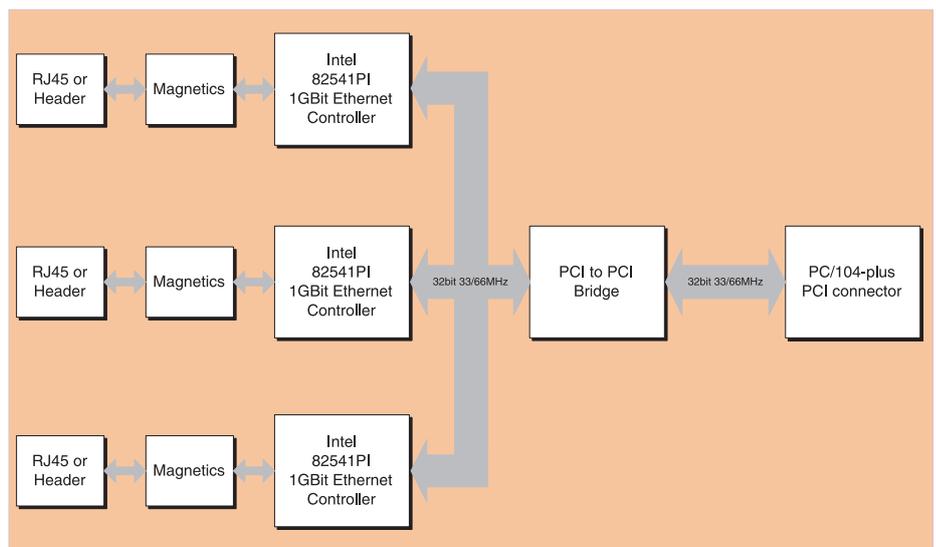
TRIGET-3M
for MPL PIP assembly

TRIGET-3H
with lockable headers

TRIGET-3S
with standard RJ45

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| RJ45 or Header | ↔ | Magnetics | ↔ | Intel 82541PI 1GBit Ethernet Controller | | | |
| RJ45 or Header | ↔ | Magnetics | ↔ | Intel 82541PI 1GBit Ethernet Controller | 32bit 33/66MHz | PCI to PCI Bridge | 32bit 33/66MHz → PC/104-plus PCI connector |
| RJ45 or Header | ↔ | Magnetics | ↔ | Intel 82541PI 1GBit Ethernet Controller | | | |

**MPL**
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# Technical Features TRIGET

| Board Key Data | | |
|---|---|---|
| Network Controller | Intel 82541PI | up to three controllers onboard |
| Physical Interface | RJ45 or 10-pin 2mm lockable header | supports auto crossover (Auto MDI/MDIX) |
| Status LEDs | 2 LEDs for each port | Link/Activity and Speed |
| Host Interface | PC/104-Plus compliant | stackthrough module, up to 66MHz |
| | PCI specification revision 2.3 compliant | supports both 5.0V and 3.3V signaling |
| Power | Runs with 5V input power only | |

| Physical / Power | | |
|---|---|---|
| Size (length x width x height) | 92.4 x 95.9 x 11.1 mm | 2mm header version (–xH) |
| | 90.7 x 95.9 x 13.9 mm | RJ45 version (–xS) |
| | 122.2 x 95.9 x 13.9 mm | PIP built-in version (–xM) |
| Weight | 100g / 0.22 lbs | fully equipped TRIGET-3S |
| Power | +5VDC ± 5% | input over PCI connector |
| Power consumption | Typically 4W | with 3x Gigabit links |
| Temperature Range | -20°C up to 60°C | optional -40°C up to 85°C |
| Humidity | 5% - 95% non condensing | optional coating available |

| TRIGET Versions | |
|---|---|
| Product number | Function |
| TRIGET-3S | 3 Gigabit Ethernet controller on standard PC/104-Plus module. Ethernet interfaces over RJ45 connectors. |
| TRIGET-2S | 2 Gigabit Ethernet controller on standard PC/104-Plus module. Ethernet interfaces over RJ45 connectors. |
| TRIGET-1S | 1 Gigabit Ethernet controller on standard PC/104-Plus module. Ethernet interfaces over RJ45 connectors. |
| TRIGET-3H | 3 Gigabit Ethernet controller on standard PC/104-Plus module. Ethernet interfaces over 2mm lockable headers. |
| TRIGET-2H | 2 Gigabit Ethernet controller on standard PC/104-Plus module. Ethernet interfaces over 2mm lockable headers. |
| TRIGET-1H | 1 Gigabit Ethernet controller on standard PC/104-Plus module. Ethernet interfaces over 2mm lockable headers. |
| TRIGET-3M | 3 Gigabit Ethernet controller on PIP built-in PC/104-Plus based module. Ethernet interfaces over RJ45 connectors directly available on the PIP Front. |
| TRIGET-2M | 2 Gigabit Ethernet controller on PIP built-in PC/104-Plus based module. Ethernet interfaces over RJ45 connectors directly available on the PIP Front. |
| TRIGET-1M | 1 Gigabit Ethernet controller on PIP built-in PC/104-Plus based module. Ethernet interfaces over RJ45 connectors directly available on the PIP Front. |
| TRIGET-3HKIT | Cable and connector kit for TRIGET-3H. Small PCB with 3 Ethernet interfaces over RJ45 connectors. |

Please note, not always all versions are available from stock.

| Other MPL Peripherals | | |
|---|---|---|
| Product family | Function | Form Factor |
| MAGBES | Manageable Gigabit Ethernet switches with copper and fiber optic ports | PC/104 |
| TX2FX | Ethernet Media Converter copper to fiber optic | Mezzanine |
| OSCI | Four or eight RS232/RS485/RS422 serial lines | PC/104-Plus |
| PATI | PowerPC controlled intelligent Analog- and Timer-IO module | PC/104-Plus |
| PCCARD | PCMCIA PC Card adapter with two slots | PC/104-Plus |
| IDE2CF / IDE2PCC | IDE to CompactFlash or PC Card adapter | PC/104 |