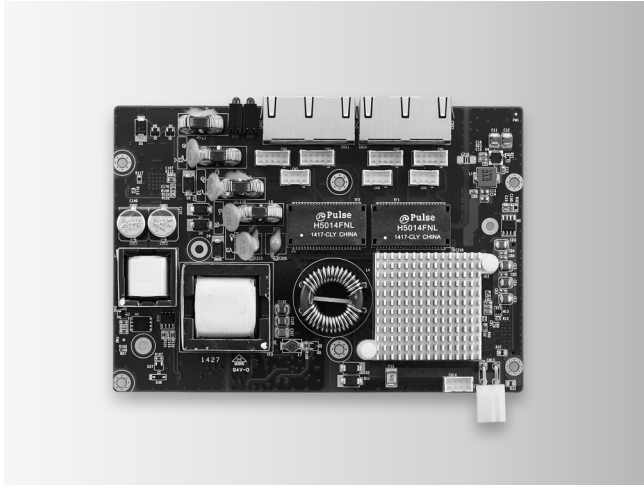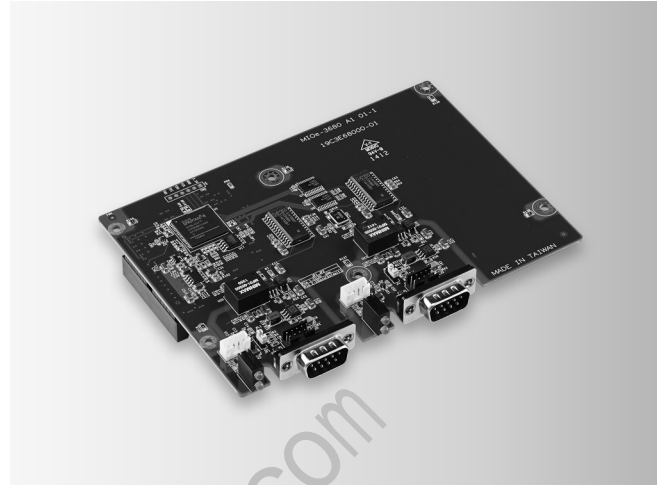# MIOE-3674
MIOE-3680

4-port 10/100/1000 BaseT(X) 802.3af (PoE) Compliant Ethernet ports

2-Port CAN-Bus MIOe Module with Isolation Protection

MIOE-3674

RoHS COMPLIANT 2002/95/EC CE FCC

MIOE-3680

RoHS COMPLIANT 2002/95/EC CE FCC

Features

- Intel® server-grade GbE Mac Controller
- Supports 12 V_{DC} AT/ATX input power - - boost up to 15.4 watts at 48 V_{DC} per PoE port
- Powered Device (PD) auto detection and classification
- Supports IEEE 802.3u Auto-Negotiation 2.25 KV isolation protection on LAN ports and power
- Supports Jumbo frame (9,500 byte) and link aggregation
- Supports IEEE-1588 and IEEE-802.1 AS PC CPU off-load by onboard DSP processor

Specifications

General

- **Compatibility**   IEEE 802.3, IEEE 802.3u, IEEE802.3ab, IEEE802.3x, IEEE802.3af
- **Speed**   10/100/1000 Mbps
- **No. of Ports**   2 or 4 Gigabit Ethernet Media Access Control (MAC) and physical layer (PHY) ports.
- **Port Connector**   8-pin RJ45
- **Protection**   Built-in 2.25KV isolation protection on LAN ports and power, ESD 8KV, EFT 2KV
- **Bus Interface**   MIOe PCI Express

Power Over Ethernet Port

- 2 or 4 Gigabit Ethernet Media Access Control (MAC) and physical layer (PHY) ports.
- Full controller compliance with IEEE 802.3.af standard for maximum 15.4 watts, with power up to 48 V over existing Ethernet infrastructure, with no modifications required
- Standard IEEE 802.3 Ethernet interface provided for 1000BASE-T, 100BASE-TX, and 10BASE-T applications (802.3, 802.3u, and 802.3ab, 802.3x) 9014 bytes jumbo frame support

Protection

- **Isolation Protection**   2.25KV isolation on LAN and power

Environment

- **Operating Temperature**   0°C to 50°C (normal)
  0°C to 60°C * (Ambient; 0 CFS airflow)

Note! With an external heat sink. Airflow required for operation in 60°C ambient temperature.

Ordering Information

- **MIOe-3674**   4-port 10/100/1000 BaseT(X) 802.3af (PoE) Compliant Ethernet ports

Features

- Operates two separate CAN networks at the same time
- High speed transmission up to 1 Mbps
- 16 MHz CAN controller frequency
- Optical isolation protection of 2,500 V_{DC} ensures system reliability
- I/O address automatically assigned by PCI PnP
- LED indicates Transmit/Receive status on each port
- Windows DLL library and examples included
- Supports Windows CE5/CE6/XP/7 driver and utility
- Supports Linux 2.4.xx / 2.6.xx; QNX 6.3x/6.4.x/6.5.x Intel x86 hardware platform

Specifications

General

- **Bus Interface**   PCIe bus spec. 1.2 compliant
- **Ports**   2
- **Dimensions**   102 x 145 mm
- **Connector**   Dual DB9 male connectors
- **Power Consumption**   5 V @ 400 mA (Typical)

Communications

- **Communication Controller**   NXP SJA-1000
- **CAN Transceiver**   NXP_TJA1051T
- **Signal Support**   CAN_H, CAN_L
- **CAN Controller Frequency**   16 MHz
- **Speed (bps)**   Up to 1 Mbps programmable transfer rate

Protection

- **Isolation Protection**   2.25KV isolation on LAN and power

Environment

- **Operating Temp.**   -40 ~ 85°C (-40 ~ 185°F)

Ordering Information

- **MIOe-3680**   2-port CAN-bus MIOe /PCIe Module with Isolation Protection (CANbus transceiver board included)

ADVANTECH   **Programmable Automation Controllers**

All product specifications are subject to change without notice

Date updated: 18-Aug-2014