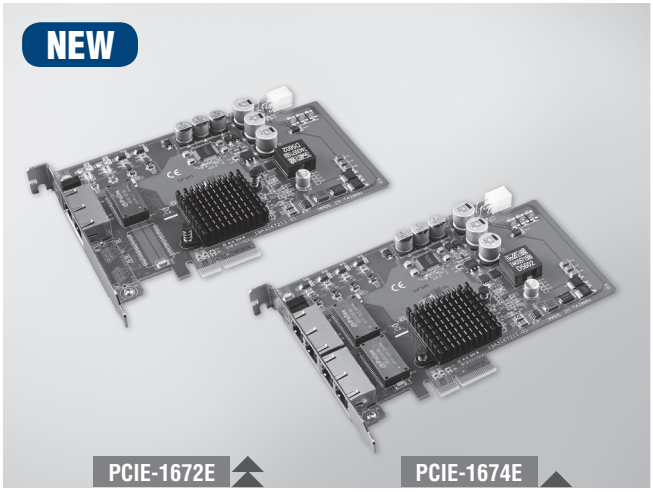
PCIE-1672
PCIE-1674

2-Port PCI Express GigE Vision Frame Grabber

4-Port PCI Express GigE Vision Frame Grabber



Features

- Intel® server-grade GbE Mac Controller
- PCI Express® x4 compliant
- PoE power from PCIe slot(Total Max. 18W)
- Powered Device (PD) auto detection and classification
- Supports IEEE 802.3u Auto-Negotiation
- Supports Jumbo frame (9,500 byte) and link aggregation
- Supports IEEE-1588 and IEEE-802.1 AS
- Per port power on/off control (PCIE-1672V/PCIE-1674V)

Introduction

The PCIE-1672/PCIE-1674 PoE (Power over Ethernet) PCIE series is PCI express Network Interface Card which supports 2 or 4 independent 10/100/1000BaseT(X) 802.3af (PoE) compliant Ethernet ports. With 12 VDC AT/ATX power input, the PCIE-1672/PCIE-1674 can boost then provides up to 15.4 watts at 48 VDC power to maximum 2 or 4 x PoE ports on each module. It allows power to be supplied to connected devices, such as PoE-based GigE cameras in machine vision inspection systems, without the need to use separate PoE injectors for those applications. The PCIE-1672/PCIE-1674 is ideally designed for scientific research instrumentations, Medical Research Instrumentations, Machine Vision System, which can also benefit from a scalable Gigabit backbone construction with Power-over-Ethernet support.

Specifications

Ethernet Communications

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
Bus Interface	PCI Express® x4 compliant

Protection

ESD	8KV (air), 4KV (contact)
EFT	2 KV
Surge Protection	1 KV

Power Requirements

Input Voltage	12 V_{DC} direct from PCIe slot, or AT/ATX System power input
Overload Current Protection	Present
Connection	AT/ATX Power Jack
Output PoE Power	48 V_{DC} PoE Power output, total Max. 18W (total Max. 60W with AT/ATX System power input)

Environment

Operating Temperature	0 ~ 50°C (32 ~ 122°F)
Storage Temperature	-20 ~ 80°C (-4 ~ 176°F)
Operating Humidity	5 ~ 95% RH

Mechanics

Dimensions (W x D)	185 x 110 mm (7.3" x 3.9")

Certification

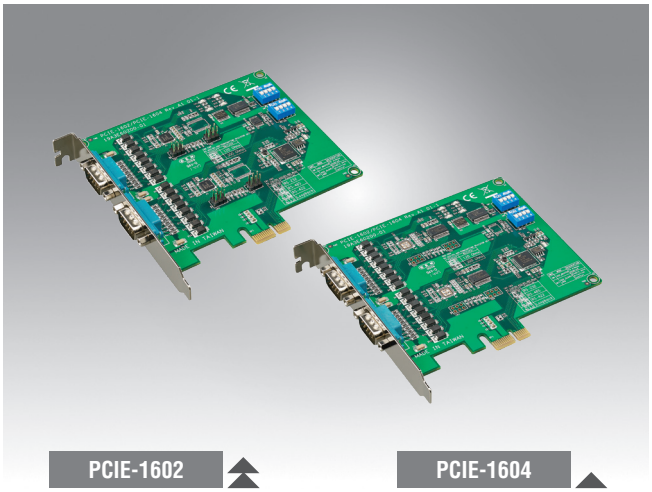
Patent	http://www.advantech.com/legal/patent

Ordering Information

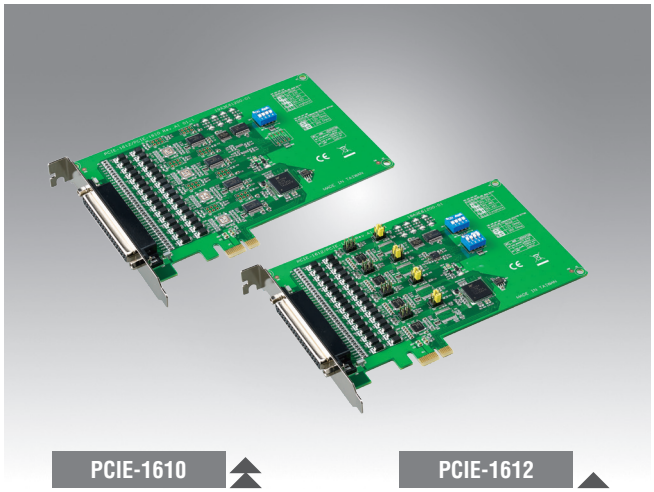
PCIE-1672E-AE	2-port PCI Express GigE Vision Frame Grabber
PCIE-1674E-AE	4-port PCI Express GigE Vision Frame Grabber
PCIE-1672V-CE	2-port PCIe programmable power on/off Frame Grabber
PCIE-1674V-CE	4-port PCIe programmable power on/off Frame Grabber

PCIE-1602
PCIE-1604
PCIE-1610
PCIE-1612

2-Port RS-232/422/485 PCI Express Communication Card
2-Port RS-232 PCI Express Communication Card
4-Port RS-232 PCI Express Communication Card
4-Port RS-232/422/485 PCI Express Communication Card



PCIE-1602 PCIE-1604



PCIE-1610 PCIE-1612

Features

- PCI Express bus 2.0 compliant
- Up to 921.6 kbps speed for extremely fast data transmissions
- Supports any baud rate setting
- 2 x RS-232 or RS- 232/422/485 ports
- Supports Windows XP/7/8/10, and Linux operating systems
- XR17V352 UART with 256-byte FIFOs

Specifications

General

- **Bus Type** PCI Express bus 2.0 compliant
- **Bus Interface** PCI Express x1
- **Certification** CE, FCC class A
- **Connectors** 2 x DB9, male
- **Dimensions (L x H)** 119.63 x 111 mm (4.71" x 4.4")
- **Power Consumption** 260 mA @ +3.3 V (typ.)

Communications

- **Comm. Controller** XR17V352
- **Data Bits** 5, 6, 7, 8
- **FIFO** 256 bytes
- **Parity** None, Odd, Even, Mark and Space
- **Speed** 50 bps ~ 921.6 kbps
- **Stop Bits** 1, 1.5, 2

Software

- **Bundled Software** ICOM tools
- **OS Support** Windows XP/7/8/10 and Linux (check the software release note for versions supported)

Environment

- **Operating Humidity** 5 ~ 95% RH, non-condensing
- **Operating Temperature** -10 ~ 60 °C (14 ~ 140 °F)
- **Storage Temperature** -25 ~ 85 °C (-13 ~ 185 °F)

Protection

Part Number	ESD Protection	EFT Protection	Surge Protection	Isolation Protection
PCIE-1602B	15KV (air), 8KV (contact)	1000 V	1000 VDC	
PCIE-1602C	15KV (air), 8KV (contact)	1000 V	1000 VDC	3000 VDC
PCIE-1604B	15KV (air), 8KV (contact)	1000 V	1000 VDC	
PCIE-1604C	15KV (air), 8KV (contact)	1000 V	1000 VDC	3000 VDC

Ordering Information

- **PCIE-1602B-AE** 2-port RS-232/422/485 PCI Express comm. card w/surge
- **PCIE-1602C-AE** 2-port RS-232/422/485 PCI Express comm. card w/surge and isolation
- **PCIE-1604B-AE** 2-port RS-232 PCI Express comm. card w/surge
- **PCIE-1604C-AE** 2-port RS-232 PCI Express comm. card w/surge and isolation

Accessories

- **OPT1-DB9E-AE** DB9 to 10-pin wiring board

Features

- PCI Express bus 2.0 compliant
- Up to 921.6 kbps speed for extremely fast data transmissions
- Supports any baud rate setting
- 4 x RS-232 or RS- 232/422/485 ports
- Supports Windows XP/7/8/10, and Linux operating systems
- XR17V354 UART with 256-byte FIFOs

Specifications

General

- **Bus Type** PCI Express bus 2.0 compliant
- **Bus Interface** PCI Express x1
- **Certification** CE, FCC class A
- **Connectors** 1 x DB37, female
- **Dimensions (L x H)** 168 x 111 mm (6.6" x 4.4")
- **Power Consumption** 260 mA @ +3.3 V (typ.)

Communications

- **Comm. Controller** XR17V354
- **Data Bits** 5, 6, 7, 8
- **FIFO** 256 bytes
- **Parity** None, Odd, Even, Mark and Space
- **Speed** 50 bps ~ 921.6 kbps
- **Stop Bits** 1, 1.5, 2

Software

- **Bundled Software** ICOM tools
- **OS Support** Windows XP/7/8/10 and Linux (check the software release note for versions supported)

Environment

- **Operating Humidity** 5 ~ 95% RH, non-condensing
- **Operating Temperature** -10 ~ 60 °C (14 ~ 140 °F)
- **Storage Temperature** -25 ~ 85 °C (-13 ~ 185 °F)

Protection

Part Number	ESD Protection	EFT Protection	Surge Protection	Isolation Protection
PCIE-1610B	15KV (air), 8KV (contact)	1000 V	1000 VDC	
PCIE-1612B	15KV (air), 8KV (contact)	1000 V	1000 VDC	
PCIE-1612C	15KV (air), 8KV (contact)	1000 V	1000 VDC	3000 VDC

Ordering Information

- **PCIE-1610B-AE** 4-port RS-232 PCI Express comm. card w/surge
- **PCIE-1612B-AE** 4-port RS-232/422/485 PCI Express comm. card w/surge
- **PCIE-1612C-AE** 4-port RS-232/422/485 PCI Express comm. card w/surge and isolation

Note: This series includes an OPT4A cable.

Accessories

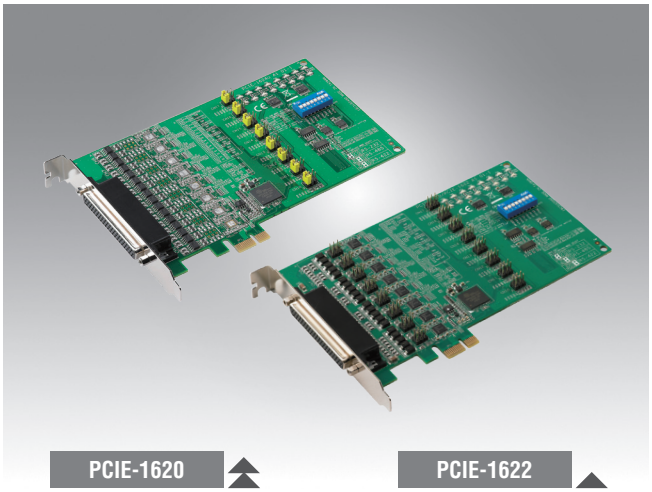
- **OPT4A-AE** 1 x DB37 to 4 x DB9 cable, 30 cm
- **1700018791** 1 x DB37 to 4 x DB25 cable, 30 cm
- **OPT1-DB9E-AE** DB9 to 10-pin wiring board

Last updated: 22-Aug-2019

PCIE-1620
PCIE-1622

8-Port RS-232 PCI Express Communication Card

8-Port RS-232/422/485 PCI Express Communication Card



Features

- PCI Express bus 2.0 compliant
- Up to 921.6 kbps speed for extremely fast data transmissions
- Supports any baud rate setting
- 8 x RS-232 or RS-232/422/485 ports
- XR17V358 UART with 256-byte FIFOs
- Supports Windows XP/7/8/10, and Linux operating systems
- Board ID function for fixed COM ports

Introduction

PCIE-1620 and PCIE-1622 are 8-port RS-232/RS-232/422/485 PCI Express communication cards, compatible with the PCI Express x1 specification. Featuring 8 EFT protected ports (up to 1,000 V) with high data transmission speeds (up to 921.6 kbps) and high-performance XR17V358 UARTs with 256-byte FIFOs to reduce CPU load, PCIE-1620 and PCIE-1622 are ideal for diverse applications in multitasking environments.

Specifications

General

- **Bus Type** PCI Express bus 2.0 compliant
- **Bus Interface** PCI Express x1
- **Certification** CE, FCC class A
- **Connectors** 1 x DB62, female (PCIE-1620A/22A/22B)
  1 x DB78, female (PCIE-1622C)
- **Dimensions (L x H)** 168 x 111 mm (6.6" x 4.4")
- **Power Consumption** 260 mA @ +3.3 V (typ.)

Communications

- **Comm. Controller** XR17V358
- **Data Bits** 5, 6, 7, 8
- **Data Signals** RS-232: TxD, RxD, RTS, CTS, DTR, DSR, DCD (PCIE- 1620A/22B) TxD, RxD, RTS, CTS, DTR, DSR, DCD, RI (PCIE-1622C) RS-422: Tx+, Tx-, Rx+, Rx- (PCIE-1620A/22A/22B) CTS+, CTS-, RTS+, RTS-, Tx+, Tx-, Rx+, Rx- (PCIE- 1622C) RS-485: Data+, Data- (PCIE-1622)
- **FIFO** 256 bytes
- **Flow Control** DTR/DSR, RTS/CTS, Xon/Xoff
- **Parity** None, Odd, Even, Mark, or Space
- **Speed** 50 bps ~ 921.6 kbps
- **Stop Bits** 1, 1.5, 2

Protection

Part Number	ESD Protection	EFT Protection	Surge Protection	Isolation Protection
PCIE-1620A	15KV (air), 8KV (contact)	1000 V		
PCIE-1622B	15KV (air), 8KV (contact)	1000 V	1000 V	
PCIE-1622C	15KV (air), 8KV (contact)	1000 V	1000 V	3000 V_{DC}

Software

- **Bundled Software** ICOM tools
- **OS Support** Windows XP/7/8/10 and Linux (check the software release note for versions supported)

Environment

- **Operating Humidity** 5 ~ 95% RH, non-condensing
- **Operating Temperature** -10 ~ 60 °C (14 ~ 140 °F)
- **Storage Temperature** -25 ~ 85 °C (-13 ~ 185 °F)

Ordering Information

- **PCIE-1620A-BE** 8-port RS-232 PCI Express comm. card
- **PCIE-1622B-BE** 8-port RS-232/422/485 PCI- Express comm. card w/ surge
- **PCIE-1622C-AE** 8-port RS-232/422/485 PCI- Express comm. card w/ surge and isolation protection

Accessories

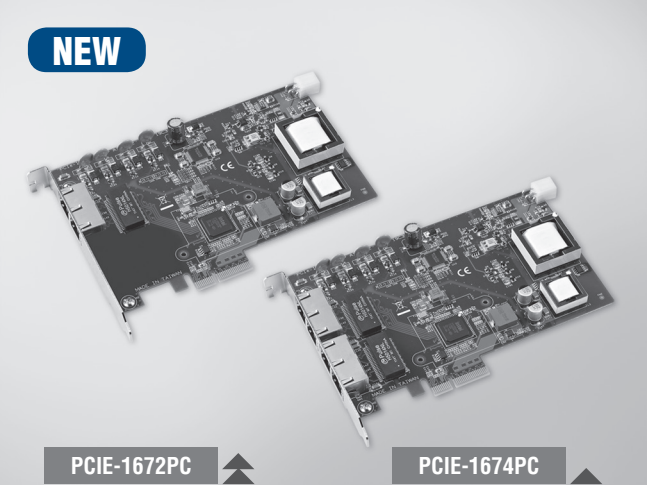
- **OPT8C-AE** 1 x DB62 to 8 x DB25 cable, 1 m (for PCIE-1620A-BE and PCIE-1622B-BE)
- **OPT8H-AE** 1 x DB62 to 8 x DB9 cable, 1 m (for PCIE-1620A-BE and PCIE-1622B-BE)
- **OPT8J-AE** 1 x DB78 to 8 x DB9 cable, 1 m (for PCIE-1622C-AE)
- **OPT1-DB9E-AE** DB9 to 10-pin wiring board

Last updated: 22-Aug-2019

PCIE-1672PC
PCIE-1674PC

2-port 10/100/1000 BaseT(X) 802.3af (PoE) Compliant Ethernet ports, PCI Express Communication Card

4-port 10/100/1000 BaseT(X) 802.3af (PoE) Compliant Ethernet ports, PCI Express Communication Card



Features

- Intel® server-grade GbE Mac Controller
- PCI Express® x4 compliant
- 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

Introduction

The PCIE-1672PC/PCIE-1674PC PoE (Power over Ethernet) PCIE series is PCI express communication card which supports 2 or 4 independent 10/100/1000BaseT(X) 802.3af (PoE) compliant Ethernet ports. With 12 V_{DC} AT/ATX power input, the PCIE-1672PC/PCIE-1674PC can boost then provides up to 15.4 watts at 48 V_{DC} power to maximum 2 or 4 x PoE ports on each module. It allows power to be supplied to connected devices, such as PoE-based GigE cameras in machine vision inspection systems, without the need to use separate PoE injectors for those applications. With its 2.25 KV isolation protection, and overload current/voltage protection on LAN ports, the PCIE-1672PC/PCIE-1674PC is ideally designed for scientific research instrumentations, Medical Research Instrumentations, Gigabit Ethernet surveillance IP cameras in intelligent transportation systems, which can also benefit from a scalable Gigabit backbone construction with Power-over-Ethernet support.

Specifications

Ethernet Communications

- **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** PCI Express® x4 compliant

Power Requirements

- **Input Voltage** 12 V_{DC}, AT/ATX System power input
- **Overload Current Protection** Present
- **Connection** AT/ATX Power Jack
- **Output PoE Power** 48 V_{DC} PoE Power output
  PCIE-1672PC Supports 2 PoE ports up to 15.4 W at 48 V_{DC}
  PCIE-1674PC Supports 4 PoE ports up to 15.4 W at 48 V_{DC}
- **Power Consumption**
  PCIE-1672PC Typical: 15.4W, Max: 35.4W
  PCIE-1674PC Typical: 15.4W, Max: 70.8W

Environment

- **Operating Temperature** 0 ~ 50°C (0 ~ 122°F)
- **Storage Temperature** -20 ~ 80°C (-4 ~ 176°F)
- **Operating Humidity** 5 ~ 95% RH

Mechanics

- **Dimensions (W x D)** 185 x 110 mm (7.3" x 3.9")

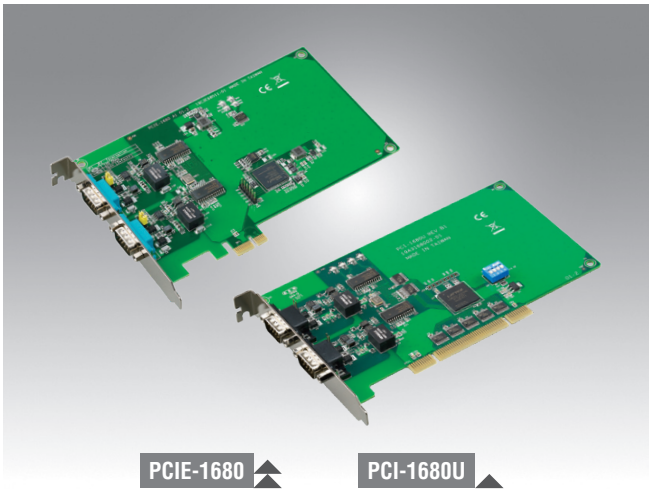
Ordering Information

- **PCIE-1672PC** 2-port PoE ports PCI Express Comm Card
- **PCIE-1674PC** 4-port PoE ports PCI Express Comm Card

PCIE-1680
PCI-1680U

2-Port CAN Bus PCIE Card with Isolation Protection

2-Port CAN Bus Universal PCI Card with Isolation Protection



FCC CE

Features

- PCIe bus specification 1.1 compliant
- 2 x Independent CAN ports
- Up to 1 Mbps transmission speeds
- 16 MHz CAN controller frequency
- Optical isolation protection of 2,500 V_{DC}
- Transmit/Receive status LED indicators
- Windows DLL library and examples included
- Supports latest Windows system
- Supports Linux SocketCAN

Introduction

PCI-1680 and PCIE-1680 are purpose-built communication cards that ensure CAN connectivity. With 2 independent CAN controllers built in, PCI-1680 and PCIE-1680 enable bus arbitration and error detection with automatic transmission repetition, drastically reducing data loss and ensuring system reliability. Additionally, both PCI-1680 and PCIE-1680 operate at baud rates of up to 1 Mbps.

Specifications

General

- **Bus Type** PCI Express V1.0/Universal PCI
- **Certification** CE, FCC
- **Connectors** 2 x DB9, male
- **Ports** 2
- **Power Consumption** 3.3 V @ 600 mA (typical)

Communication

- **CAN Controller** NXP SJA-1000
- **CAN Transceiver** NXP TJA1051T
- **Signal Support** CAN_H, CAN_L
- **Protocol** CAN 2.0 A/B
- **Data Transfer Rate** Programmable up to 1 Mbps
- **CAN Frequency** 16MHz

Protection

- **Isolation Protection** 2,500 V_{DC}

Mechanical and Environmental

- **Operating Temperature** 0 ~ 70 °C (32 ~ 158 °F) (refer to IEC 60068-2-1, 2)
- **Storage Temperature** -40 ~ 85 °C (-40 ~ 185 °F)
- **Operating Humidity** 5 ~ 95% relative humidity, non-condensing
- **Dimensions (L x H)** 168 x 111 mm (6.6" x 4.4")

Ordering Information

- **PCIE-1680-B** 2-port CAN bus PCIE card with isolation protection
- **PCI-1680U-BE** 2-port CAN bus PCI card with isolation protection

Accessories

- **OPT1-DB9E-AE** DB9 to 10-pin wiring board

Last updated: 11-Nov-2022