

# MIC-3761

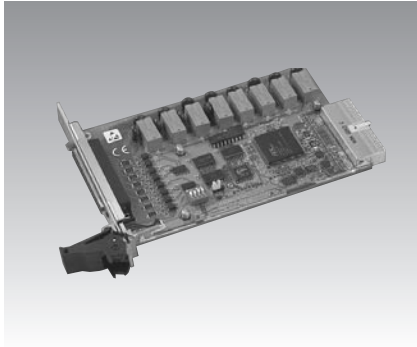
# MIC-3780/3780R

# MIC-3612

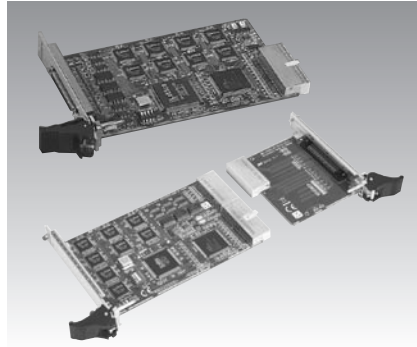
## 8-ch Relay and Isolated Digital Input CPCI Card

## 8-ch Counter/Timer CPCI Cards

## 4-port RS-232/422/485 Communication CPCI Card with Surge Protection

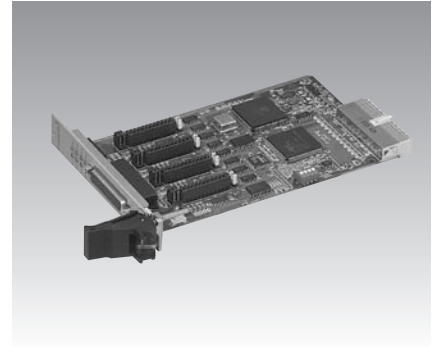


MIC-3761/3



MIC-3780R/3

MIC-3780/3



MIC-3612/3

### Specifications

#### Isolated Digital Input

- Channels 8
- Input Voltage Logic 0: 3 V max.  
Logic 1: 10 V min.  
(50 V max.)
- Input Current\* 10 V<sub>DC</sub> 1.6 mA (typical)  
12 V<sub>DC</sub> 1.9 mA (typical)  
24 V<sub>DC</sub> 4.1 mA (typical)  
48 V<sub>DC</sub> 8.5 mA (typical)  
50 V<sub>DC</sub> 8.9 mA (typical)
- Interrupt Capable Ch. ID0 – ID7
- Isolation Protection 3,750 V<sub>DC</sub>
- Overvoltage Protection 70 V<sub>DC</sub>
- Opto-Isolator Response 25 µs
- Input Resistance 560 Ω

#### Relay Output

- Channels 8
- Relay Type SPDT  
(4 Form A, and 4 Form C)
- Contact Rating 3 A @ 250 V<sub>AC</sub> or  
3 A @ 24 V<sub>DC</sub>
- Relay on Time 15 ms max.
- Relay off Time 5 ms max.
- Life Span Mechanical  
2 x 10<sup>7</sup> ops. min.  
Electrical  
2 x 10<sup>6</sup> ops. min.  
(contact rating)
- Resistance 1 GΩ min. (at 500 V<sub>DC</sub>)

#### General

- PICMG Compliance CompactPCI V2.0, R 3.0  
Hot-Swap V2.1, R 2.0, R 2.1
- Bus Type CompactPCI
- I/O Connectors 1 x 37-pin D-type female  
connector with 3U Bracket
- Dimensions 160 x 100 mm (6.3" x 3.9")  
with 3U Bracket
- Power Consumption Typical: +5 V @ 220 mA  
Max.: +5 V @ 750 mA
- Certifications CE

### Ordering Information

- MIC-3761/3 3U 8-ch Relay Actuator and  
8-ch Isolated D/I Card
- PCL-10137-1/2/3 DB-37 cable assembly, 1, 2  
and 3 m
- ADAM-3937 DB-37 Wiring Terminal for  
DIN-rail Mounting
- PCLD-780 Universal Screw Terminal  
Board

### Specifications

#### Counter/Timer

- Channels 8 (independent)
- Resolution 16 bits
- Compatibility 5 V/TTL
- Max. Input Frequency 20 MHz
- Reference Clock Internal: 20 MHz
- Counter Modes 12 (programmable)
- Interrupt Capable Ch. 8

#### Digital Input

- Channels 8
- Compatibility 5 V/TTL
- Input Voltage Logic 0: 0.8 V max.  
Logic 1: 2.4 V min.
- Interrupt Capable Ch. 1 (channel 0)

#### Digital Output

- Channels 8
- Compatibility 5 V/TTL
- Output Voltage Logic 0: 0.5 V max. @ 24 mA  
Logic 1: 2.4 V min. @ -15 mA
- Output Capability Sink: 0.5 V max. @ 24 mA  
Source: 2.4 V min. @ -15 mA

#### General

- PICMG Compliance CompactPCI V2.0, R 3.0  
Hot-Swap V2.1, R 2.0
- Bus Type CompactPCI V2.1
- I/O Connectors 68-pin SCSI-II female
- Dimensions (L x H) 160 x 100 mm (6.3" x 3.9")  
with 3U Bracket
- Power Consumption Typical: +5 V @ 900 mA  
Max: +3.3 V @ 1.2 A
- Operating Temperature 0 ~ 60° C (32 ~ 140° F)  
(refer to IEC 68-2-1, 2)
- Storage Temperature -20 ~ 70° C (-4 ~ 158° F)
- Relative Humidity 5 ~ 95% RH non-condensing  
(refer to IEC 68-2-3)
- Certifications CE, FCC Class A

### Ordering Information

- MIC-3780/3 3U Compact PCI 8-ch, 16 bit  
counter/timer card
- MIC-3780R/3 3U Compact PCI 8-ch, 16 bit  
counter/timer card with Rear  
I/O support
- PCL-10168 68-pin SCSI-II cable with  
male connectors on both  
ends and special shielding for  
noise reduction,  
1 and 2 m
- ADAM-3968 68-pin SCSI-II Wiring  
Terminal Board for DIN-rail  
mounting

### Features

- PCI Specification 2.1 compliant
- Speeds up to 921.6 kbps
- 4-port RS-232/422/485
- With Surge protection
- 16C954 UARTs with 128-byte standard
- Standard Industrial CompactPCI® 3U Board size
- I/O address automatically assigned by PCI Plug & Play
- OS supported: Windows® 98/2000/XP, Linux 2.4
- Interrupt status register for increased performance
- Automatic RS-485 data flow control
- Tx/Rx LED indicator

### Specifications

#### Communications

- Communication BUS controller: PLX9030  
Controller  
UART: 16C954
- Data Bits 5, 6, 7, 8
- Data Signals Tx/D, Rx/D, RTS, CTS, DTR,  
DSR, DCD, RI, GND  
(for RS-232)  
Tx/D, Rx/D, RTS, CTS  
(for RS-422)  
DATA+, DATA- (for RS-485)
- IRQ All ports use the same IRQ  
assigned by PCI Plug & Play
- Parity None, even, odd
- Speed (bps) 50 ~ 921.6 k
- Stop Bits 1, 1.5, 2

#### General

- PICMG Compliance CompactPCI V2.0, R 3.0  
Hot swap V2.1, R 2.0
- Bus Type CompactPCI V2.1
- I/O Connectors DB 44pin female
- Dimensions (L x H) 160 x 100 mm (6.3" x 3.9"),  
3U bracket

#### Power Consumption

	Typical	Max.
+5 V	220 mA	285 mA
+3.3 V	100 mA	200 mA
+12 V	60 mA	80 mA

- Operating Temperature 0 ~ 70° C (IEC68-2-1, 2)
- Storing Temperature -20 ~ 80° C
- Operating Humidity 5 ~ 95% RH, non-condensing  
(IEC 68-2-1, 2)

### Ordering Information

- MIC-3612/3 3U CompactPCI 4-port  
RS-232/422/485 Card