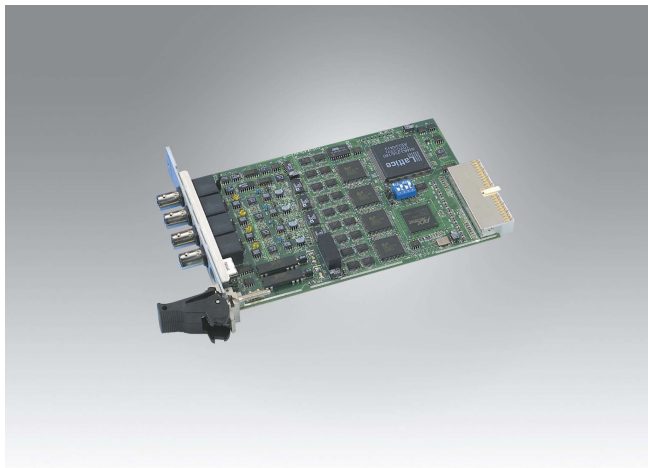


# MIC-3714

# MIC-3716

30 MS/s, 12-bit, Simultaneous 4-ch  
Analog Input 3U CompactPCI® Card

250 kS/s, 16-bit, 16-ch Multifunction  
3U CompactPCI® Card



MIC-3714/3

CE FCC

## Specifications

### Analog Input

- **Channels** 4 single-ended channels
- **Resolution** 12 bits
- **Max. Sampling Rate** 30 MS/s (Only in FIFO 32k)
- **FIFO Size** 32,768 samples/ch
- **Overvoltage Protection** 30 Vp-p
- **Input Impedance** 50 Ω/1 MΩ/jumper selectable, 100 pF
- **Sampling Modes** Software, pacer, post-trigger, pre-trigger, delay-trigger, about-trigger
- **Input Range (V)** ±5, ±2.5, ±1, ±0.5

### General

- **Bus Type** CompactPCI
- **I/O Connectors** 4 x BNC connector (for AI)  
1 x PS/2 connector (for ext. clock and trigger)
- **Dimensions (L x H)** 160 x 100 mm (6.3" x 3.9") with 3U bracket
- **Power Consumption** Typical: +3.3 V @ 550 mA, +5 V @ 150 mA,  
+12 V @ 600 mA  
Max.: +3.3 V @ 850 mA, +5 V @ 200 mA,  
+12 V @ 700 mA
- **Operating Temperature** 0 ~ 70 °C (32~158 °F)
- **Storage Temperature** -20 ~ 85 °C (-4 ~ 185 °F)
- **Storage Humidity** 5 ~ 95% RH, non-condensing (refer to IEC 68-2-3)
- **Certification** CE, FCC

## Ordering Information

- **MIC-3714/3-AE** 3U, 30 MS/s Simultaneous 4-ch Analog Input Card
- **ADAM-3909-AE** DB-9 Wiring Terminal for DIN-rail Mounting
- **PCL-10901-3E** PS2 to DB-9 wiring cable, 3 m
- **PCL-1010B-1E** BNC to BNC wiring cable, 1 m



MIC-3716/3

CE

## Specifications

### Analog Input

- **Channels** 16 single-ended, 8 differential, or combination
- **Resolution** 16 bits
- **Max. Sampling Rate** 250 kS/s
- **FIFO Size** 1024 samples/ch
- **Overvoltage Protection** 30 Vp-p
- **Input Impedance** 100 MΩ/10 pF (Off); 100 MΩ/100 pF (On)
- **Sampling Modes** Software, pacer, or external
- **Input Range**

<b>Bipolar</b>	±10	±5	±2.5	±1.25	±0.625
<b>Unipolar</b>	-	0 ~ 10	0 ~ 5	0 ~ 2.5	0 ~ 1.25
<b>Accuracy (% of FSR ±1LSB)</b>	0.15	0.03	0.03	0.05	0.1

### Analog Output

- **Channels** 2
- **Resolution** 16 bits
- **Output Rate** Static update
- **Output Range**

<b>Internal Reference</b>	<b>Bipolar</b>	±5, ±10
	<b>Unipolar</b>	0 ~ 5, 0 ~ 10
<b>External Reference</b>		0 ~ +x V @ +x V (-10 ≤ x ≤ 10) -x ~ +x V @ +x V (-10 ≤ x ≤ 10)

- **Slew Rate** 20 V/μs
- **Driving Capability** +20 mA
- **Output Impedance** 0.1 Ω max.
- **Operation Mode** Single output
- **Accuracy** Relative: ±1LSB

### Digital Input/Output

- **Channels** 16, 5V/TTL
- **Input Voltage** Logic 0: 0.4 V max.  
Logic 1: 2.4 V min.
- **Output Voltage** Logic 0: 0.4 V max.  
Logic 1: 2.7 V min.
- **Output Capability** S<sub>ink</sub>: 0.4 V max. @ +8 mA  
Source: 2.4 V min. @ -0.4 mA

### Counter/Timer

- **Channels** 3
- **Compatibility** 5 V/TTL
- **Resolution** 16 bits
- **Max. Input Frequency** 1 MHz
- **Reference Clock** Internal 10 MHz  
External Clock Frequency 10 MHz  
External Voltage Range TTL (Low: 0.8, High: 2 V)

### General

- **PICMG Compliance** CompactPCI V2.0, R 2.1 Hot-Swap V2.1, R 2.0
- **Bus Type** CompactPCI
- **I/O Connector Type** 68-pin SCSI-II female
- **Dimensions (L x H)** 160 x 100 mm (6.9" x 3.9") with 3U Bracket
- **Power Consumption** Typical: +5 V @ 850 mA, +12 V @ 600 mA  
Max.: +5 V @ 1 A, +12 V @ 700 mA
- **Certification** CE

## Ordering Information

- **MIC-3716/3-AE** 3U, 250 kS/s, 16-bit, 16-ch High-Resolution Multifunction Card
- **PCLD-8710-AE** Industrial Wiring Terminal Board with CJC circuit for DIN-rail Mounting, (cable not included)
- **PCL-10168-1E/2E** 68-pin SCSI-II cable with male connectors on both ends and special shielding for noise reduction, 1 and 2 m
- **ADAM-3968-AE** 68-pin SCSI-II Wiring Terminal Board for DIN-rail Mounting