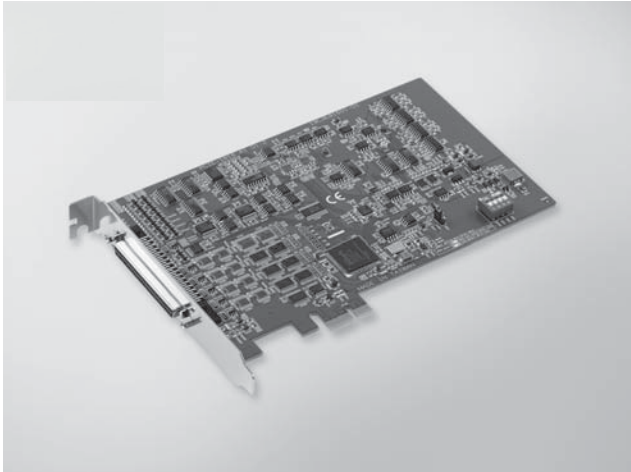


PMT-MF-1816 (Multi-Function Card)



Features

- 2 analog outputs up to 3 MS/s, 16-bit resolution
- Supports Analog and Digital Trigger for AI/O
- Supports Waveform generation for AO
- 24 programmable digital I/O lines
- Two 32-bit programmable counter/timers
- Onboard FIFO memory (4k samples)
- Supports Microsoft Windows 8 (desktop mode only)/7/XP

Specifications

Analog Input

- **Channels** Single-end 16-ch
Differential 8-ch
- **Resolution** 16 bits
- **Sample Rate** Single Channel 1 MS/s max.
Multi-Channel 500 kS/s max.
Single Channel 5 MS/s max.
Multi-Channel 1 MS/s max.

- **Trigger Reference** Analog Trigger, Digital Trigger
- **FIFO Size** 4k samples
- **Max. Input Voltage** ± 15 V
- **Input Impedance** 1 G Ω
- **Sampling Mode** Software and external clock
- **Input Range** Software programmable

Gain	0.5	1	2	4	8
Bipolar	± 10 V	± 5	± 2.5	± 1.25	± 0.625
Unipolar	N/A	0 ~ 10	0 ~ 5	0 ~ 2.5	0 ~ 1.25
Absolute Accuracy (% of FSR)*	0.0075	0.0075	0.0075	0.008	0.008

Analog Output

- **Channels** 2
- **Resolution** 16 bits
- **Output Rate** 3 MS/s max.
- **Output Range** Software programmable

Internal Reference	Unipolar	0 ~ 5 V 0 ~ 10 V
	Bipolar	-5 V ~ 5 V -10 V ~ 10 V
External Reference		0 ~ +x V @ -x V (-10 $\leq$ x $\leq$ 10)

- **Slew Rate** 20 V/ μ s
- **Driving Capability** 5 mA
- **Operation Mode** Static update, Waveform Generation
- **Accuracy** INLE: ± 4 LSB, DNLE: ± 1 LSB

Digital I/O

- **Channels** 24
- **Compatibility** 5 V/TTL
- **Input Voltage** Logic 0: 0.8 V max.
Logic 1: 2.0 V min.
- **Output Voltage** Logic 0: 0.8 V max.
Logic 1: 2.0 V min.
- **Output Capability** Sink: 15 mA @ 0.8 V
Source: 15 mA @ 2.0 V

Counter

- **Channels** 2
- **Resolution** 32 bits
- **Compatibility** 5 V/TTL
- **Max. Input Frequency** 10 MHz
- **Pulse Generation** Yes
- **Timebase Stability** 50 ppm

General

- **Form factor** PCI Express x 1
- **Triggering** 16 bits Analog x 2 / Digital x 2
- **I/O Connector** 68-pin SCSI female connector
- **Dimensions (L x W)** 167 x 100 mm
- **Power Consumption** Typical: 3.3 V @ 488 mA
12 V @ 112 mA
Max.: 3.3 V @ 2.25 A
12 V @ 390 mA
- **Operating Temperature** 0 ~ 60°C (32 ~ 140°F)
- **Storage Temperature** -40 ~ 70°C (-40 ~ 158°F)
- **Storage Humidity** 5 ~ 95% RH non-condensing