

PCI-32MF16

32-channel single-ended/16-channel differential/mixed mode, 16-bit analog input acquisition, 2-channel 16-bit analog output, 16-channel TTL digital input/output, 1-channel 32-bit programmable counter



Specifications and Features

Analog Input (AD)

Channel: 32-channel single-ended/16-channel differential/mixed mode

Resolution: 16-bit

FIFO Size: 4K x 22-bit

Sampling Rate: 250K sps

Reference Voltage: Internal 2.5V

Input Voltage Range and Gain:

| Gain: | 1 | 2 | 4 | 8 |
|----------|------|-----|-------|--------|
| Bipolar: | ±10V | ±5V | ±2.5V | ±1.25V |

Max. Safe Input Voltage: 30Vp-p

Input Impedance: 100 MΩ

Trigger Mode: Internal software trigger, external digital trigger, external analog trigger, synchronous trigger

Accuracy: 0.03% FSR

Isolation Digital Input/Output

Channel: 16-channel

Input Level: $V_{IH(MIN)} = 2.0V$, $V_{IL(MAX)} = 0.8V$ (TTL)

Output Level: $V_{OH(MIN)} = 2.4V @ 8mA$, $V_{OL(MAX)} = 0.5V$ (TTL)

Input Method: Supports both dry and wet contact input

Compatibility: Compatible with TTL

Throughput: 1M (test result under specific condition)

Analog Output (DA)

Channel: 2-channel

Resolution: 16-bit

FIFO Size: 4K x 16-bit

Voltage Output Range: ±5V, ±10V

Accuracy: 0.03%FSR (internal reference voltage)

Slew Rate: 10V/μs

Driving Capacity: 3mA

Output Impedance: ≤0.4Ω

Settling Time: 4μs to 0.01%FSR

Reference Voltage: Internal +5V, external +5V

Programmable Counter

Channel: 1-channel

Bit: 32-bit

Compatibility: Compatible with TTL

Internal Time Base: 10MHz

Max. Working Frequency: 10MHz

Clock Input Level: $V_{IL(MAX)} = 0.8V$, $V_{IH(MIN)} = 2.0V$

Gating Input Level: $V_{IL(MAX)} = 0.8V$, $V_{IH(MIN)} = 2.0V$

Counter Output Level: $V_{OH(MIN)} = 2.4V @ 8mA$, $V_{OL(MAX)} = 0.5V$ (TTL)

General Specifications

4-bit Board ID setup for motherboard

External Dimensions of Motherboard (L x W): 175mm x 106mm (6.9" x 4.2")

External Dimensions of Daughterboard (L x W): 132mm x 98mm (5.2" x 3.9")

Cascade Height = 11mm

Power Consumption: Typical: +5 V @ 600mA Max: +5V @ 1000mA

Operating Temperature: 0°C~60°C

Storage Temperature: -20°C~70°C

Relative Humidity: Operating: 5%~85%, non-condensing

Storage: 5%~95%, non-condensing

Ordering Information

| Part Number | Model Number | Description |
|-------------|--------------|---|
| 0060-003330 | PCI-32MF16 | 32-channel single-ended/16-channel differential/mixed mode, 16-bit analog input acquisition, 2-channel 16-bit analog output, 16-channel TTL digital input/output, 1-channel 32-bit programmable counter |
| 0060-001900 | PCLD-880 | DB-37 port industrial terminal board |