

ME-6675

1 MS/s, 18 Bits, 32-CH, PCIe, PWM/Encoder, Multifunction Card









Key Features

- 1 MS/s/ch sampling rate, support 32 analog inputs at 18 bits resolution.
- 1 MS/s/ch output rate, support 2 analog outputs at 16 bits resolution.
- 16 differential, 32 single-ended analog input.
- 1023 samples per input/output function.
- With synchronization bus.
- Low profile is available for easy application integration.

Overview

The Vecow ME66 is a series of high-performance data acquisition devices with PCIe Interface. They were built for demanding industrial, automation and science applications. The ME66 integrates analog inputs, analog outputs, general purpose digital I/Os, timer/counters and a proprietary inter-system-synchronization-link (ISSL). A fully automated analog calibration circuitry is included as the foundation of high precision and long-term accuracy. Calibration routines can be performed upon user's request. Despite its low-profile dimensions, rapid data transfer can be achieved, thanks to PCIe bus interface. Scatter-gather DMA engine technology and sophisticate device-driver API help to transfer large data chunks without hassle.





ME-Series Data Acquisition Card (DAQ)

Specification

Mechanical		
Interface	PCle x1	
Dimensions	178 x 64 x 13 mm	
Certifications	FCC, CE, RoHS Compliance	

Low Profile Module Yes

Analog Input

Channels 16 Differential, 32 Single-Ended

Sampling Rate 1 MS/s/ch Resolution 18 Bits

Input Voltage Ranges $\pm 10 \text{ V}, \pm 5 \text{ V}, \pm 2.5 \text{ V}, \pm 1.25 \text{V}$

Input FIFO Size 1023 Samples

Data Transfer Mode Scatter/Gather DMA, Interrupt, Polling

Analog Output

Number of Channels2Output Rate1 MS/s/chDAC Resolution16 Bits

Output Voltage Ranges ±10 V or ±External Reference

Output FIFO Size 1023 Samples/ ch

Data Transfer Mode Scatter/Gather DMA, Interrupt, Polling

Digital I/O

Number of Channels 48
Maximum Clock Rate 40 MHz

FIFO Size 1023 Samples For Each I/O Direction

3.3 V TTL/ CMOS, On Lower 16-Bit Port

3.3 V/ 2.5 V/ 1.8 V LTTL/ LCMOS, On Higher 32-Bit Port

Programmable I/O Direction Yes, On Per Pin Basis

Data Transfer Mode Scatter/Gather DMA, Interrupt, Polling

Timer/ Counter

Number of Timer/ Counter2Resolution32 BitsMax. Source Frequency40 MHz

PWM/ Encoder Yes, Support x1/ x2/ x4 Encoder Modes

Measurement Modes Edge Counting, Period, Frequency

Generation Modes Single Pulse, Continuous Pulse, Frequency

Glitch Removal Yes

Synchronization/ Triggering

Triggering Analog, Digital
Trigger Mode Post, Gated, Middle

Trigger Source Ext. Digital , Analog, Pacer, Software

Synchronization Bus Yes

Ordering Information

Part Number	Description
ME-6675	1 MS/s, 18 Bits, 32-CH, PCIe, PWM/Encoder
ME-6675L	1 MS/s, 18 Bits, 32-CH, PCIe, PWM/Encoder, Low-profile
CB-168368-01	Male/Male Cable with 68-Pin SCSI-VHDCI , 1M
TD-268001	Terminal Board with DIN Rail Mounted, 68-Pin SCSI Female Connector

Vecow Co., Ltd. Tel: +886-2-2258-5665 Fax: +886-2-2258-4622 info@vecow.com

www.vecow.com