

DAQ-ACP2010-1711LE

High performance 2U Rackmount DAQ Starter Kit



Features

- Intel Q87 Platform
 - Supports Intel® Core™ i7/i5/i3/Pentium processor
 - Supports four DIMM sockets up to 32 GB DDR3 1333/1600
 - Supports triple display VGA/2 DVI-D and dual GbE LAN
- Expandability for today and the future
 - Supports one PCIe x16 and one PCI slots via riser card
 - Provides great scalability for 3.5" and 5.25" drive bays
- Data Acquisitions
 - 12-bit, 100KS/s, 16-ch analog input
 - 16-ch digital input and 16-ch digital output
 - Advantech DAQNav (Data Acquisition Software)

System Specifications

Form Factor		2U	
Computing System	Chipset	Intel Q87	
	CPU*	Supports 4th Generation Intel Core™ i7/i5/i3/Pentium processor (LGA1150)	
	Memory*	Supports four DIMM sockets up to 32 GB DDR3 1333/1600	
Graphics	Controller	Intel HD Graphics (Depends on processor)	
	VRAM	1 GB maximum shared memory with 2 GB and above system memory installed	
Expansion Slot (availability after install bundled I/O card)	PCI	32-bit/33 MHz, 1 slot	
	PCIe (x16)	1 slot	
Storage	SATA 3.0	6	
Drive Bay	5.25" (front-accessible)	1	
	3.5" (front-accessible)	1	
	3.5" (Internal)	2	
Ethernet	Interface	10/100/1000 Mbps	
	Controller	GbE LAN1: Intel I217LM, GbE LAN2: Intel I211AT	
I/O Port	Front I/O Ports	2 x USB, 1 x PS2	
	Rear I/O Ports	4 x USB (Two USB 3.0), 2 x PS/2, 1 x COM, 1 x VGA, 2 x DVI, 2 x RJ-45, 1 x Line-Out, 1 x Mic-In, 2 x 9-pin D-Sub (opening)	
Operating System*		Microsoft® Windows® 7/8.1/10	
Watchdog Timer	Output	System reset	
	Interval	Programmable 1 ~ 255 sec	
Power Supply	Power Output Wattage	350W	
	Type	Single Flex ATX Auto-Switching power supply	
Cooling	Chassis Fan	2	
	Air Filter	Yes	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85% @ 40° C non-condensing	10 ~ 95% @ 40° C non-condensing
Physical Characteristics	Color	Black	
	Dimensions (W x H x D)	482 x 88 x 480 mm (19" x 3.46" x 18.9")	
	Weight	15 kg (33 lb)	

* Configurations are variable upon regions. Please contact Advantech sales for more details.

DAQ Card Specifications

Analog Input

- **Channels** 16 single-ended
- **Resolution** 12 bits
- **Max. Sampling Rate** 100 kS/s
Note: The sampling rate for each channels will be affected by used channel number. For example, if 4 channels are used, the sampling rate is $100k/4 = 25$ kS/s per channel.)
- **FIFO Size** 1,024 samples
- **Overvoltage Protection** 30 Vp-p
- **Input Impedance** 2 M Ω /5 pF
- **Sampling Modes** Software, onboard programmable pacer, or external
- **Input Range (V, software programmable) & Absolute Accuracy**

Gain	0.5	1	2	4	8
Bipolar	± 10	± 5	± 2.5	± 1.25	± 0.625
Gain Error (%FSR)	0.1	0.1	0.2	0.2	0.4

Digital Input

- **Channels** 16
- **Compatibility** 5 V/TTL
- **Input Voltage** Logic 0: 0.8 V max.
Logic 1: 2.0 V min.

Digital Output

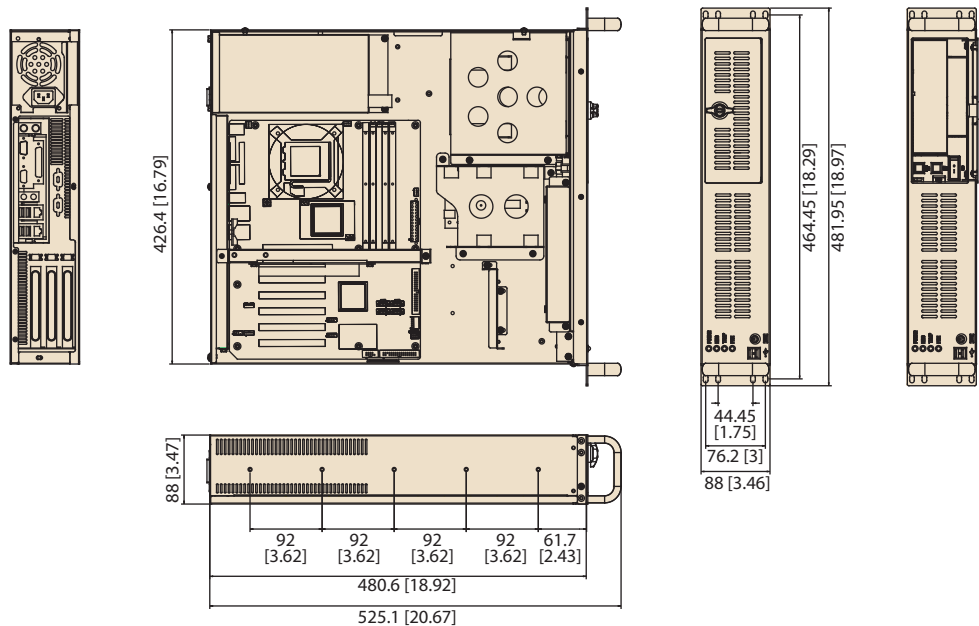
- **Channels** 16
- **Compatibility** 5 V/TTL
- **Output Voltage** Logic 0: 0.8 V
Logic 1: 2.0 V
- **Output Capability** Sink: 8.0 mA @ 0.8 V
Source: 0.4 mA @ 2.0 V

Pacer/Counter

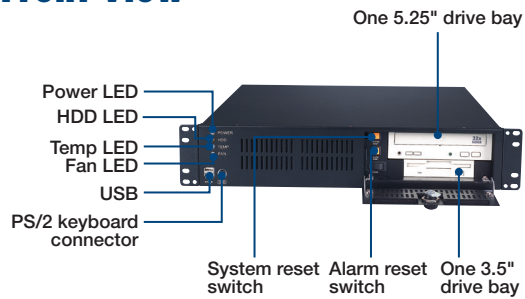
- **Channels** 1
- **Resolution** 16 bits
- **Compatibility** 5 V/TTL
- **Max. Input Frequency** 10 MHz
- **Reference Clock** Internal: 10 MHz

Dimensions

Unit: mm [inch]



Front View



Rear View



Rear view of ACP-2010MB

Ordering Information

Please visit Advantech CTOS portal for order entry.
<http://www.advantech.com/ctos>

System Content

Item	Part Number
Chassis	ACP-2010MB-35CE
Motherboard	AIMB-784G2-00A1E
Riser card	AIMB-R43PF-21A1E
DAQ Card	PCI-1711UL-CE
Cable	PCL-10168-1E
Wiring board	ADAM-3968-AE