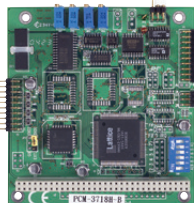


# PC/104 I/O & Power Modules



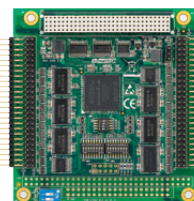
## PCM-3718H/HG/HO 100 kS/s, 12-bit, 16-Ch PC/104 Multi-function Modules

### Specifications

Analog Input			
Channels	16 single-ended / 8 differential		
Resolution	12 bits		
Max. Sampling Rate	100 KHz* (DMA transfer), *80 kHz on P4-based (or better)		
Input Impedance	10 M $\Omega$		
Input Range			
PCM-3718H and PCM-3718HO	Bipolar:	$\pm 10, \pm 5, \pm 2.5, \pm 1.25, \pm 0.625$	
	Unipolar:	0 ~ 10, 0 ~ 5, 0 ~ 2.5, 0 ~ 1.25	
PCM-3718HG	Bipolar:	$\pm 10, \pm 5, \pm 1, \pm 0.5, \pm 0.1, \pm 0.05, \pm 0.01, \pm 0.005$	
	Unipolar:	0 ~ 10, 0 ~ 1, 0 ~ 0.1, 0 ~ 0.01	
Analog Output (PCM-3718HO only)			
Channels	1 (12 bits)		
Output Rate	Static update		
Output Range	Internal Reference	Unipolar (V):	0 ~ 5, 0 ~ 10
	External Reference (V)		0 ~ 10, 0 ~ -10
Output Impedance	0.1 W max.		
Digital Input/Output			
Channels	16, 5V/TTL		
General			
I/O Connectors	2 x 20-pin box header		
Power Consumption	Typical: 5 V @ 180 mA; Max: 5 V @ 400 mA		
Operating Temperature	0 ~ 60° C (32 ~ 140° F)		
Storage Temperature	-40 ~ 85° C (-40 ~ 185° F)		
Dimensions (L x W)	96 x 90 mm (3.8" x 3.5")		

### Ordering Information

P/N	Description
PCM-3718H-CE	100 kS/s, 12-bit Multi. PC/104 Module
PCM-3718HG-CE	100 kS/s, 12-bit High-gain Multi. PC/104 Module
PCM-3718HO-BE	100 kS/s, 12-bit Multi. PC/104 Module w/AO



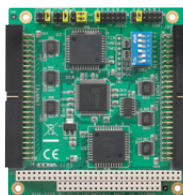
## PCM-3753I 96-Ch Digital I/O PCI-104 Module

### Specifications

Digital Input/Output	
Channels	96 (bi-directional)
Compatibility	5 V/TTL
Input Voltage	Logic 0: 0.8 V max.
	Logic 1: 2.0 V min.
Output Voltage	Logic 0: 0.4 V max.
	Logic 1: 2.4 V min.
Output Capability	Sink: 0.4 V @ 24 mA Source: 2.4 V @ 15 mA
General	
I/O Connectors	4 x IDC 50-pin
Operating Temperature	-20 ~ 70° C
Storage Temperature	-50 ~ 120° C
Dimensions (L x W)	96 x 90 mm (3.8" x 3.5")

### Ordering Information

P/N	Description
PCM-3753I-AE	96-Ch Digital I/O PCI-104 Module



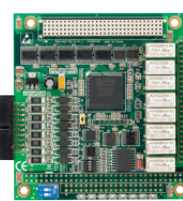
## PCM-3724 48-Ch Digital I/O PC/104 Module

### Specifications

Digital Input/Output	
Channels	48 (bi-directional)
Compatibility	5 V/TTL
Input Voltage	Logic 0: 0.8 V max. @ -1 $\mu$ A
	Logic 1: 2.0 V min. @ 1 $\mu$ A
Output Voltage	Logic 0: 0.4 V max. @ 35 mA max.
	Logic 1: 2.0 V min. @ -35 mA max
Interrupt Capable Ch.	2
General	
Bus Type	PC/104
I/O Connectors	2 x 50-pin box header
Dimensions (L x H)	96 x 90 mm (3.8" x 3.5")
Power Consumption	5 V @ 90 mA
Operating Temperature	0 ~ 60° C (32 ~ 140° F)
Storage Temperature	-40 ~ 85° C (-40 ~ 185° F)
Storage Humidity	0 ~ 90% RH, non-condensing

### Ordering Information

P/N	Description
PCM-3724-BE	PC/104 48-bit Digital I/O Card



## PCM-3761I 8-Ch Relay and 8-Ch Isolated Digital Input PCI-104 Module

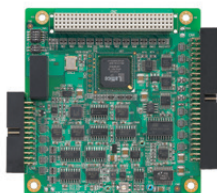
### Specifications

Isolated Digital Input	
Channels	8
Input Voltage	Logic 0: 3 V max., Logic 1: 5 V min., 30 V max.
Input Current	2.5 mA @ 5 V, 15 mA @ 30 V
Input Resistance	2 k $\Omega$ 0.5 W
Isolation Protection	2,500 V <sub>DC</sub>
Overvoltage Protection	70 V <sub>DC</sub>
Interrupt Capable Ch.	8
Opto-isolator Response Time	25 $\mu$ s
Relay Output	
Channels	8
Relay Type	DPDT, Form C
Contact Rating	0.25 A @ 250 V <sub>AC</sub> , 2 A @ 30 V <sub>DC</sub>
Operate/Release Time	typ. 3 / 2 ms, max. 5 / 4 ms
Life Span	5 x 10 <sup>7</sup> cycles typ.: 10 mA @ 12 V 2 x 10 <sup>6</sup> cycles typ.: 2000 mA @ 30 V
Resistance Contact	50 m $\Omega$
Insulation	1 G $\Omega$ min. (at 500 V <sub>DC</sub> )
General	
I/O Connectors	1 x IDC-50 pin, 1 x IDC-20 pin
Operating Temperature	0 ~ 60° C (32 ~ 140° F) (refer to IEC 68-2-1, 2)
Storage Temperature	-20 ~ 70° C (-4 ~ 158° F)
Dimensions (L x W)	96 x 90 mm (3.8" x 3.5")

### Ordering Information

P/N	Description
PCM-3761I-AE	8-Ch Relay/Isolated Digital Input PCI-104 Module

## PC/104 I/O & Power Modules



### PCM-3810I

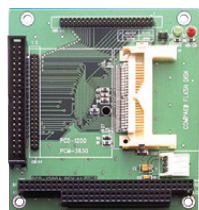
250 kS/s, 12-bit, 16-Ch  
Multifunction PCI-104 Module

#### Specifications

Analog Input	
Channels	16 single-ended or 8 differential or combination
Resolution	12 bits
Max. Sampling Rate	250 kS/s
Ring Buffer Size	4,096 samples
Input Range	Bipolar: $\pm 10, \pm 5, \pm 2.5, \pm 1.25, \pm 0.625$ Unipolar: 0 ~ 10, 0 ~ 5, 0 ~ 2.5, 0 ~ 1.25
Analog Output	
Channels	2
Output Range	Internal Reference (V): 0 ~ 5, 0 ~ 10, $\pm 5, \pm 10$ External Reference: 0 ~ +x V @ +x V (-10 $\leq$ x $\leq$ 10), -x ~ +x V @ +x V (-10 $\leq$ x $\leq$ 10)
Resolution	12 bits
Output Rate	250 kS/s
Ring Buffer Size	4,096 samples
Digital Input/Output	
Channels	16
Compatibility	5V/TTL
Counter/Timer	
Channels	3 (independent)
Resolution	24 bits
Compatibility	5 V/TTL
Max. Input Frequency	10 MHz
Interrupt Capable Ch.	3
PWM Channels	3
General	
Bus Type	PCI-104
I/O Connectors	1 x 26-pin, 1 x 50-pin box header
Dimensions (L x H)	96 x 90 mm (3.8" x 3.5")
Operating Temperature	0 ~ 60° C (32 ~ 140° F) (refer to IEC 68-2-1, 2)
Storage Temperature	-20 ~ 70° C (-4 ~ 158° F)

#### Ordering Information

P/N	Description
PCM-3810I-AE	250 kS/s, 12-bit Multi. PCI-104 Module



### PCM-3835

IDE Flash Disk Module/  
CompactFlash Card

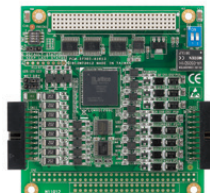


#### Specifications

General	
Bus Interface	PC/104
IDE Connector	Two onboard 44-pin 2.0 mm pitch IDE connectors and one 40-pin 2.5 mm pitch IDE connector
Power Supply Voltage	+5 V $\pm 10\%$
Environment	0 ~ 60° C, operating
Power Connector	Standard 4-pin power input
Mechanical and Environmental	
Dimensions (L x W)	96 x 90 mm (3.8" x 3.5")
Weight	0.084 kg (0.185 lb)
Operating Temperature	0 ~ 60° C (32 ~ 140° F)
Operating Humidity	0% ~ 90% relative humidity, non-condensing

#### Ordering Information

P/N	Description
PCM-3835-00A1E	IDE Flash disk module



### PCM-3730I

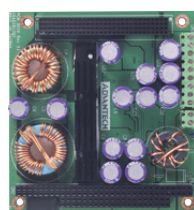
32-Ch Isolated Digital I/O  
PCI-104 Module

#### Specifications

Isolated Digital Input	
Channels	16
Input Voltage	Logic 0: 3 V max., Logic 1: 5 V min. 30 V max.
Input Resistance	2 k $\Omega$
Isolation Voltage	2,500 V <sub>DC</sub>
Opto-isolator Response Time	25 $\mu$ s
Isolated Digital Output	
Channels	16
Output Voltage Open Collector	5 ~ 30 V <sub>DC</sub>
Output Sink Current	300 mA max.
Isolation Voltage	2,500 V <sub>DC</sub>
Opto-isolator Response Time	25 $\mu$ s
General	
I/O Connectors	2 x 20-pin box header
Dimensions (L x W)	96 x 90 mm (3.8" x 3.5")
Operating Temperature	-20 ~ 70° C (-4 ~ 158° F)
Storage Temperature	-50 ~ 120° C (-58 ~ 248° F)

#### Ordering Information

P/N	Description
PCM-3730I-AE	32-ch Isolated Digital I/O PCI-104 Module



### PCM-3910

DC to DC Power Supply  
PC/104-plus Module



#### Specifications

General	
Bus Interface	PC/104-Plus
Input Voltage	10 V to 24 V <sub>DC</sub> $\pm 5\%$
Output Voltage	5 V output 10.0 A 12 V output 2.0 A -5 V output 0.4 A (optional) -12 V output 0.4 A
Mechanical and Environmental	
Dimensions (L x W)	96 x 90 mm (3.8" x 3.5")
Operating Temperature	0 ~ 60° C (32 ~ 140° F)
Weight	0.084 kg (0.185 lb)
Operating Humidity	0% ~ 90% relative humidity, non-condensing

#### Ordering Information

P/N	Description
PCM-3910-00A1E	DC to DC power module PC/104-plus Module

Note: For wide temperature range, please contact sales rep.