

Interface® PCI Express Board Reference Guide

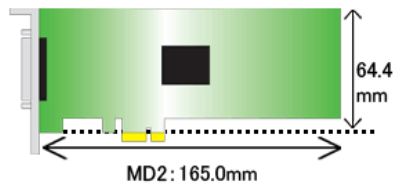
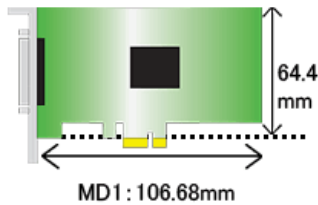
About PCI Express Board

PCI Express is a next generation computer expansion bus standard designed to replace conventional PCI bus standard. It features higher maximum system bus throughput, lower I/O pin count and smaller physical footprint. It offers 2.5 Gb/s band width per direction per lane. You can group multiple lanes with typical lane width of x1, x4, x8, and x16.

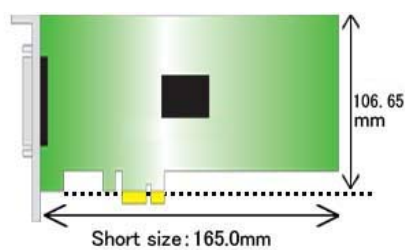
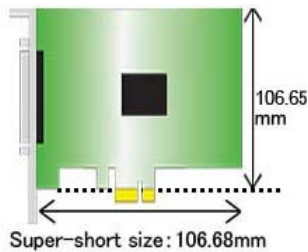


[Board Dimensions]













Low Profile



Full Height



Interface PCI Express Board Lineup

Digital I/O	Relay Output	Analog I/O	Serial Communication HDLC
			
Parallel Communication	CAN	Motion Controller	Counter
			
Frame Grabber	GP-IB	LAN	MemoLink
			

Interface Product List

Part Number	Product Name
Digital I/O	
PEX-224140	Isolated 32-Channel +5 Vdc to +24 Vdc Digital Input PCI Express Product (On-Board Isolated Power Supply)
PEX-234104	Isolated 32-Channel +5 Vdc to +24 Vdc/60 mA Digital Output PCI Express Product
PEX-284122	Isolated 16-Channel Digital Input and 16-Channel Digital Output +5 Vdc to +24 Vdc/60 mA PCI Express Product (On-Board Isolated Power Supply)
PEX-285122	Isolated 16-Channel Digital Input and 16-Channel Digital Output +12 Vdc to +24 Vdc/60 mA PCI Express Product
PEX-291144	20-Mega Samplings Per Second 32-Channel TTL DMA Transfer Digital Input/Output PCI Express Product
PEX-292144	20-Mega Samplings Per Second 32-Channel Low Voltage TTL DMA Transfer Digital Input/Output PCI Express Product
PEX-292366	48-Channel Low Voltage TTL Digital Input/Output PCI Express Product
PEX-293166	48-Channel +5 Vdc to +24 Vdc CMOS Digital Input/Output PCI Express Product
PEX-H2230W	Isolated 64-Channel +5 Vdc to +36 Vdc Digital Input PCI Express Product (On-Board Isolated Power Supply)
PEX-H224020	Isolated 128-Channel +5 Vdc to +24 Vdc Digital Input PCI Express Product (On-Board Isolated Power Supply)
PEX-H225020	Isolated 128-Channel +12 Vdc to +24 Vdc Digital Input PCI Express Product
PEX-H2330W	Isolated 64-Channel +5 Vdc to +36 Vdc/100 mA Digital Output PCI Express Product
PEX-H234002	Isolated 128-Channel +5 Vdc to +24 Vdc Digital Output PCI Express Product
PEX-H235002	Isolated 128-Channel +12 Vdc to +24 Vdc Digital Output PCI Express Product
PEX-H2826W	Isolated 32-Channel Digital Input and 32-Channel Digital Output +5 Vdc to +36 Vdc/100 mA PCI Express Product (On-Board Isolated Power Supply)
PEX-H284011	Isolated 64-Channel Digital Input and 64-Channel Digital Output +5 Vdc to +24 Vdc/100 mA PCI Express Product (On-Board Isolated Power Supply)
PEX-H285011	Isolated 64-Channel Digital Input and 64-Channel Digital Output +12 Vdc to +24 Vdc/100 mA PCI Express Product
PEX-H285144	Isolated 32-Channel Digital Input and 32-Channel Digital Output +12 Vdc to +24 Vdc/100 mA PCI Express Product
PEX-H291022	128-Channel TTL Digital Input/Output PCI Express Product
PEX-H291388	64-Channel TTL Digital Input/Output PCI Express Product
PEX-H292022	128-Channel Low Voltage TTL Digital Input/Output PCI Express Product
PEX-H292388	64-Channel Low Voltage TTL Digital Input/Output PCI Express Product
PEX-H293022	128-Channel +5 Vdc to +24 Vdc CMOS Digital Input/Output PCI Express Product
PEX-H293388	128-Channel +5 Vdc to +48 Vdc CMOS Digital Input/Output PCI Express Product
PEX-H2994W	Isolated 64-Channel +5 Vdc to +36 Vdc/100 mA Digital Input/Output PCI Express Product (On-Board Power Supply)

Part Number	Product Name
Relay Output	
PEX-251100	4-Channel Transfer Contacts Mechanical Relay and Individual-Isolated +12 Vdc to +24 Vdc Digital Input/Output PCI Express Product
PEX-251101	8-Channel Transfer Contacts Mechanical Relay Digital Output PCI Express Product
PEX-H251500	32-Channel Normally-Open Contacts Photo-MOS Relay Output PCI Express Product
PEX-H286122	Isolated 16-Channel Digital Input and 16-Channel Digital Output t +12 Vdc to +24 Vdc Normally-Open Contacts Photo-MOS Relay Output PCI Express Product
Analog I/O	
PEX-320724	1.5-Mega Samplings Per Second 24-Bit 2-Channel (Single-Ended) Simultaneous Sampling Analog-to-Digital Input PCI Express Product
PEX-320910	40-Mega Samplings Per Second 10-Bit 2-Channel (Differential) Simultaneous Sampling Analog-to-Digital Input (with Memory) and 8-Channel Digital Input/Output PCI Express Product
PEX-321012	1-Mega Samplings Per Second 12-Bit 4-Channel (Single-Ended) Simultaneous Sampling Analog-to-Digital Input and 8-Channel Digital Input/Output PCI Express Product
PEX-321116	1-Mega Samplings Per Second 16-Bit 8-Channel (Differential)/16-Channel (Single-Ended) Analog-to-Digital Input, Digital Input/Output, and Counter PCI Express Product
PEX-321216	Bus-Isolated 1-Mega Samplings Per Second 16-Bit 8-Channel (Differential)/16-Channel (Single-Ended) Analog-to-Digital Input, Digital Input/Output, and Counter PCI Express Product
PEX-321316	16-Bit 16-Channel (Single-Ended) Analog-to-Digital Input, Digital Input/Output, and Counter PCI Express Product
PEX-321416	Bus-Isolated 16-Bit 16-Channel (Single-Ended) Analog-to-Digital Input, Digital Input/Output, and Counter PCI Express Product
PEX-340216	16-Bit 4-Channel Digital-to-Analog Output (Bipolar +/-10 V) and 8-Channel Digital Input/Output PCI Express Product
PEX-340416	Bus-Isolated 16-Bit 4-Channel Digital-to-Analog Output (Bipolar +/-10 V) and 8-Channel Digital Input/Output PCI Express Product
PEX-361116	1-Mega Samplings Per Second 16-Bit 8-Channel (Differential)/16-Channel (Single-Ended) Analog-to-Digital Input, 16-Bit 2-Channel Digital-to-Analog Output, Digital Input/Output, and Counter PCI Express Product
PEX-361216	Bus-Isolated 1-Mega Samplings Per Second 16-Bit 8-Channel (Differential)/16-Channel (Single-Ended) Analog-to-Digital Input, 16-Bit 2-Channel Digital-to-Analog Output, Digital Input/Output, and Counter PCI Express Product
PEX-361316	16-Bit 16-Channel (Single-Ended) Analog-to-Digital Input, 16-Bit 2-Channel Digital-to-Analog Output, Digital Input/Output, and Counter PCI Express Product
PEX-361416	Bus-Isolated 16-Bit 16-Channel (Single-Ended) Analog-to-Digital Input, 16-Bit 2-Channel Digital-to-Analog Output, Digital Input/Output, and Counter PCI Express Product
PEX-H3178	Individually-Isolated 16-Bit 4-Channel (Single-Ended) Simultaneous-Sampling Analog-to-Digital Input PCI Express Product
PEX-H3525	10-Mega Samplings Per Second 12-Bit 2-Channel (Single-Ended) Simultaneous-Sampling Analog-to-Digital Input and 12-Bit 1-Channel Digital-to-Analog Output PCI Express Product
Serial Communication	
PEX-400111	1-Channel RS-232C Asynchronous Serial Communications and 1-Channel Printer Input/Output PCI Express Product
PEX-466102	2-Channel RS-485(422) Asynchronous Serial Communications PCI Express Product (with 1024-Byte FIFO)
PEX-466104	4-Channel RS-485(422) Asynchronous Serial Communications PCI Express Product (with 1024-Byte FIFO)
PEX-466120	2-Channel RS-232C Asynchronous Serial Communications PCI Express Product (with 1024-Byte FIFO)
PEX-466140	2-Channel RS-232C Asynchronous Serial Communications PCI Express Product (with 1024-Byte FIFO)
PEX-400111	1-Channel RS-232C Asynchronous Serial Communications and 1-Channel Printer Input/Output PCI Express Product
PEX-466102	2-Channel RS-485(422) Asynchronous Serial Communications PCI Express Product (with 1024-Byte FIFO)
PEX-466104	4-Channel RS-485(422) Asynchronous Serial Communications PCI Express Product (with 1024-Byte FIFO)
PEX-466120	2-Channel RS-232C Asynchronous Serial Communications PCI Express Product (with 1024-Byte FIFO)
PEX-466140	2-Channel RS-232C Asynchronous Serial Communications PCI Express Product (with 1024-Byte FIFO)
HDLC	
PEX-467101	1-Channel RS-485(422) HDLC Communications PCI Express Product (with External Clock)
PEX-467102	2-Channel RS-485(422) HDLC Communications PCI Express Product (with External Clock)
PEX-467102FM	2-Channel RS-485(422) HDLC Communications PCI Express Product (with External Clock) (FM)
PEX-467120	2-Channel RS-232C HDLC Communications PCI Express Product (with External Clock)
Parallel Communication	
PEX-8209	1-Channel Printer Input/Output PCI Express Product
CAN	
PEX-485102	2-Channel Low-Speed CAN PCI Express Product
PEX-485111	1-Channel High-Speed CAN and 1-Channel Low-Speed CAN PCI Express Product
PEX-485120	2-Channel High-Speed CAN PCI Express Product
PEX-485202	2-Channel Low-Speed CAN PCI Express Product (with 64-Message FIFO)
PEX-485211	1-Channel High-Speed CAN and 1-Channel Low-Speed CAN PCI Express Product (with 64-Message FIFO)
PEX-485220	2-Channel High-Speed CAN PCI Express Product (with 64-Message FIFO)
PEX-485420	2-Channel High-Speed CAN PCI Express Product (with multi cyclical send)

Part Number	Product Name
CAN	
PEX-H485304	4-Channel Low-Speed DMA Transfer CAN PCI Express Product (with 64-Message FIFO)
PEX-H485304P	Individually-Isolated 4-Channel Low-Speed DMA Transfer CAN PCI Express Product (with 64-Message FIFO)
PEX-H485322	2-Channel High-Speed and 2-Channel Low-Speed DMA Transfer CAN PCI Express Product (with 64-Message FIFO)
PEX-H485322P	Individually-Isolated 2-Channel High-Speed and 2-Channel Low-Speed DMA Transfer CAN PCI Express Product (with 64-Message FIFO)
PEX-H485340	4-Channel High-Speed DMA Transfer CAN PCI Express Product (with 64-Message FIFO)
PEX-H485340P	Individually-Isolated 4-Channel High-Speed DMA Transfer CAN PCI Express Product (with 64-Message FIFO)
Motion Controller	
PEX-742020	2-Axis Pulse Motion Controller PCI Express Product
PEX-H740444M	4-Axis Pulse Motion Controller PCI Express Product (Circular Linear Interpolation and Encoder Input +24 Vdc)
PEX-H740444V	4-Axis Pulse Motion Controller PCI Express Product (Circular Linear Interpolation and Encoder Input +5 Vdc)
PEX-H741280	8-Axis Pulse Motion Controller PCI Express Product (Circular Linear Interpolation)
PEX-H741444M	Isolated 4-Axis Pulse Motion Controller PCI Express Product (Circular Linear Interpolation and Encoder Input +24 Vdc)
PEX-H741444V	Isolated 4-Axis Pulse Motion Controller PCI Express Product (Circular Linear Interpolation and Encoder Input +5 Vdc)
Counter	
PEX-630101	1-Channel 32-Bit Timer/Counter PCI Express Product
PEX-631204	32-Bit 4-Channel 3-mode Pulse Counter and 16-Channel Digital Input/Output PCI Express Product
PEX-632102	32-Bit 2-Channel 50MHz Single-Phase Pulse Counter PCI Express Product
PEX-632104	32-Bit 4-Channel Multi-Function Counter PCI Express Product
Frame Grabber	
PEX-530115	5-Channel NTSC Frame Grabber PCI Express Product
PEX-530121	1-Channel CameraLink Frame Grabber PCI Express Product (Binarization)
PEX-530135	5-Channel PAL Frame Grabber PCI Express Product
PEX-530215	5-Channel NTSC Frame Grabber PCI Express Product (Binarization)
PEX-530221	1-Channel CameraLink Frame Grabber and Encoder Counter PCI Express Product
PEX-530421	1-Channel PoCL and CameraLink Frame Grabber PCI Express Product
PEX-530521	1-Channel PoCL and CameraLink Frame Grabber and Encoder Counter PCI Express Product
PEX-H530821	1-Channel Medium/Full Configuration CameraLink Frame Grabber PCI Express Product
PEX-H530922	2-Channel Base Configuration Power over CameraLink Frame Grabber PCI Express Product
PEX-H531021	1-Channel Medium/Full Configuration CameraLink Frame Grabber PCI Express Product (with FPGA expansion board)
PEX-H531122	2-Channel Base Configuration Power over CameraLink Frame Grabber PCI Express Product (with FPGA expansion board)
PEX-H531221	1-Channel Medium/Full Configuration CameraLink Frame Grabber PCI Express Product (with large capacity FPGA expansion board)
PEX-H531322	2-Channel Base Configuration Power over CameraLink Frame Grabber PCI Express Product (with image processing)
PEX-H550411	Superimpose NTSC Input/Output
GP-IB	
PEX-432101	1-Channel DMA Transfer GPIB PCI Express Product
PEX-H432101P	Bus-Isolated 1-Channel DMA Transfer GPIB PCI Express Product
LAN	
PEX-4515	1-Channel FAST Ethernet PCI Express Product
PEX-H450102	2-Channel Gigabit Ethernet PCI Express Product
PEX-H450102K	2-Channel Gigabit Ethernet PCI Express Product
PEX-H450104	4-Channel Gigabit Ethernet PCI Express Product
PEX-H450104K	4-Channel Gigabit Ethernet PCI Express Product
PEX-H450204	4-Channel High-Speed Gigabit Ethernet PCI Express Product
Memolink	
PEX-493103	3-Meter Signaling Mode Memolink Master PCI Express Product
PEX-493104	3-Meter Signaling Mode Memolink Terminator Slave PCI Express Product
PEX-493109	3-Meter Signaling Mode Memolink Extender Slave PCI Express Product

Information in this document is subject to change without prior notice.



We distribute Interface products to all over the world. Please feel free to contact us for any questions.

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