

PROFIBUS Interface boards - Technical data



PROFIBUS Protocol	PCIexpress Master/Slave ¹⁾	PCIexpress Slave ¹⁾	PCIexpress (dual channel) Master/Slave	PCI Master/Slave ^{1), 2)}	PCI Slave ^{1), 2)}	PCI (dual channel) Master/Slave ²⁾	PC/104plus Master/Slave ³⁾	PC/104plus, Master/Slave, extended temperature range ³⁾	PC Card Master	USB Master	PC/104 Master/Slave	PC/104 Master, extended temperature range	PC/104 Slave	
DP-V0, DP-V1 Master	✓	-	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	-	
DP-V2 Master ⁴⁾	✓	-	✓	✓	-	✓	✓	✓	✓	✓	-	-	-	
FMS	✓	-	✓	✓	-	✓	✓	✓	✓	-	✓	✓	-	
FDL	✓	-	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	-	
DP Slave	✓	✓	✓	✓	✓	✓	✓	✓	-	-	✓	-	✓	
Fieldbus connection	PCIexpress Master/Slave ¹⁾	PCIexpress Slave ¹⁾	PCIexpress (dual channel) Master/Slave	PCI Master/Slave ^{1), 2)}	PCI Slave ^{1), 2)}	PCI (dual channel) Master/Slave ²⁾	PC/104plus Master/Slave ³⁾	PC/104plus, Master/Slave, extended temperature range ³⁾	PC Card Master	USB Master	PC/104 Master/Slave	PC/104 Master, extended temperature range	PC/104 Slave	
Connector	9 pin D-Sub female (for PC104 and PC/104plus via ribbon cable), RS-485, galvanically isolated						9 pin D-Sub female (for PC104 and PC/104plus via ribbon cable), RS-485, galvanically isolated							
# of channels	1	1	2	1	1	2	1	1	1	1	1	1	1	
Transmission speed	9.6; 19.2; 45.45; 93.75; 187.5; 500; 1,500; 3,000; 6,000; 12,000 kbit/s						9.6; 19.2; 45.45; 93.75; 187.5; 500; 1,500; 3,000; 6,000; 12,000 kbit/s							
PC Interface	PCIexpress Master/Slave ¹⁾	PCIexpress Slave ¹⁾	PCIexpress (dual channel) Master/Slave	PCI Master/Slave ^{1), 2)}	PCI Slave ^{1), 2)}	PCI (dual channel) Master/Slave ²⁾	PC/104plus Master/Slave ³⁾	PC/104plus, Master/Slave, extended temperature range ³⁾	PC Card Master	USB Master	PC/104 Master/Slave	PC/104 Master, extended temperature range	PC/104 Slave	
Interface	PCI Express			PCI 3.3V or 5V			PC/104plus (PCI)		PC Card (PCMCIA)	USB 2.0	PC/104			
Dual port memory	512 kbytes		512 kbytes per channel	128 kbytes		128 kbytes per channel	128 kbytes		16 kbytes	-	16 kbytes		4 kbytes	
Interrupts	Plug and Play						Plug and Play			-	5, 10, 11, 12, 15			
Environment / Dimensions	PCIexpress Master/Slave ¹⁾	PCIexpress Slave ¹⁾	PCIexpress (dual channel) Master/Slave	PCI Master/Slave ^{1), 2)}	PCI Slave ^{1), 2)}	PCI (dual channel) Master/Slave ²⁾	PC/104plus Master/Slave ³⁾	PC/104plus, Master/Slave, extended temperature range ³⁾	PC Card Master	USB Master	PC/104 Master/Slave	PC/104 Master, extended temperature range	PC/104 Slave	
Operating temperature	0 °C .. +70 °C ⁵⁾			0 °C .. +70 °C ⁵⁾			0 °C .. +70 °C ⁵⁾	-40 °C .. +85 °C ⁵⁾	0 °C .. +55 °C		0 °C .. +70 °C ⁵⁾		-40 °C .. +85 °C ⁵⁾	0 °C .. +70 °C ⁵⁾
Storage temperature	-20 °C .. +70 °C			-20 °C .. +70 °C			-20 °C .. +70 °C	-40 °C .. +85 °C	-20 °C .. +70 °C		-20 °C .. +70 °C		-40 °C .. +85 °C	-20 °C .. +70 °C
Relative humidity	< 90%, non-condensing						< 90%, non-condensing							
Dimensions [mm]	168 x 69	168 x 69	168 x 103	168 x 64	168 x 64	168 x 107	90.2 x 96	90.2 x 96	PC Card Typ II	100 x 55	90.2 x 96	90.2 x 96	90.2 x 96	
Power supply	PCIexpress Master/Slave ¹⁾	PCIexpress Slave ¹⁾	PCIexpress (dual channel) Master/Slave	PCI Master/Slave ^{1), 2)}	PCI Slave ^{1), 2)}	PCI (dual channel) Master/Slave ²⁾	PC/104plus Master/Slave ³⁾	PC/104plus, Master/Slave, extended temperature range ³⁾	PC Card Master	USB Master	PC/104 Master/Slave	PC/104 Master, extended temperature range	PC/104 Slave	
Supply voltage	3.3V / 12V (± 5%) DC			5V / 3.3V (± 5%) DC			5V / 3.3V (± 5%) DC		5V (± 5%) DC	5V USB or 24V ext.	5V (± 5%) DC			
Current consumption [mA]	typ. 500 / 90	typ. 500 / 90	typ. 640 / 170	typ. 500 / 200	typ. 500 / 200	typ. 700 / 300	typ. 500 / 200	typ. 500 / 200	typ. 350	typ. 400 (USB)	typ. 700	typ. 700	typ. 600	
Certificates	PCIexpress Master/Slave ¹⁾	PCIexpress Slave ¹⁾	PCIexpress (dual channel) Master/Slave	PCI Master/Slave ^{1), 2)}	PCI Slave ^{1), 2)}	PCI (dual channel) Master/Slave ²⁾	PC/104plus Master/Slave ³⁾	PC/104plus, Master/Slave, extended temperature range ³⁾	PC Card Master	USB Master	PC/104 Master/Slave	PC/104 Master, extended temperature range	PC/104 Slave	
CE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
FCC	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Drivers available for	PCIexpress Master/Slave ¹⁾	PCIexpress Slave ¹⁾	PCIexpress (dual channel) Master/Slave	PCI Master/Slave ^{1), 2)}	PCI Slave ^{1), 2)}	PCI (dual channel) Master/Slave ²⁾	PC/104plus Master/Slave ³⁾	PC/104plus, Master/Slave, extended temperature range ³⁾	PC Card Master	USB Master	PC/104 Master/Slave	PC/104 Master, extended temperature range	PC/104 Slave	
Windows 7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Windows Vista	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Windows XP	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Windows Server 2008	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Windows Server 2003 R2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Windows 2000	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Linux	-	-	-	✓	✓	✓	✓	✓	-	-	✓	✓	✓	
Miscellaneous	C)	-	C)	C), D), F)	D), F)	C), D), F)	C), D), F)	C), D), F)	A)	-	A), B), C), D), E), F)	A), C), D), E), F)	A), B), D), E), F)	
Part number	PB-PRO1-PCIE /LP ¹⁾	PB-PRO1S-PCIE /LP ¹⁾	PB-PRO2-PCIE	PB-PRO1-PCI /LP ¹⁾	PB-PRO1S-PCI /LP ¹⁾	PB-PRO2-PCI	PB-PRO1-PC104+	PB-PRO1-PC104+XT	PB-PCcard2	PB-USB	PB-PC104-MS	PB-PC104-XT	PB-PC104-S	

¹⁾ Single channel PCI and PCI Express boards are also available with low profile slot bracket. ²⁾ Universal PCI Interfaces support PCI 5V technology (e.g. Desktop-PCs) as well as PCI 3.3V technology (e.g. server).

⁵⁾ Ambient temperature of the board inside the PC

³⁾ also available as PCI/104

⁴⁾ DP-V2 is available for customer-specific integration. Please contact us with your requirements.

^{A)} Win NT/ME/98/95 ^{B)} DP Slave for DOS ^{C)} VxWorks on request

^{D)} Win CE ^{E)} Ardence RTX ^{F)} QNX: optional, no free download