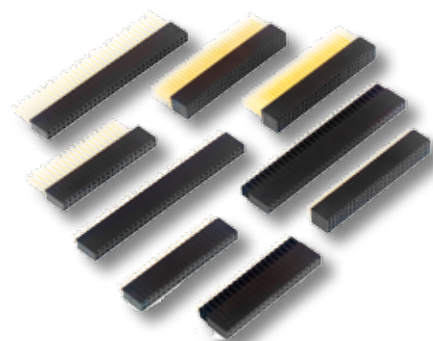


3M™ Connectors for PC104 Embedded Systems Applications

3M is offering Connectors for PC104 Embedded Systems Applications as an addition to our embedded computing product line. These connectors conform to PC/104 Embedded-PC Modules. 3M is offering both of the primary connectors specified by PC/104: 8-bit J1/P1 and 16-bit J2/P2 in both stack-through and non-stack-through options. J3/P3 connectors are also available in the PC104 Plus product line on Customer Drawing TS-2391.



3M™ Connectors for PC104 Embedded Systems Applications

Features and Benefits

PC104 Standard Benefits

Compact form factor and stacked design to meet tight space requirements of embedded applications

Self-stacking bus eliminates the need, cost and bulk of backplanes and card cages

Relaxed bus drive (6 mA) lowers power consumption (to 1-2 watts per module) and minimizes component count

Stack-through design is more rugged against shock and vibration effects

3M PC104 Connectors

Standard PC104 pin-and-socket connectors

Rugged and reliable 64- and 40-contact male/female headers

Simple contact design to accommodate many standoff heights

Available in solder tail

Target Markets and Applications

Industrial control and factory automation

Military/aerospace

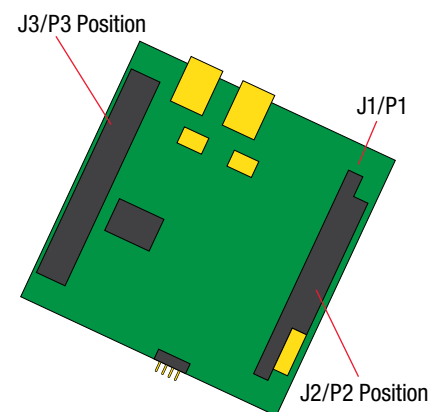
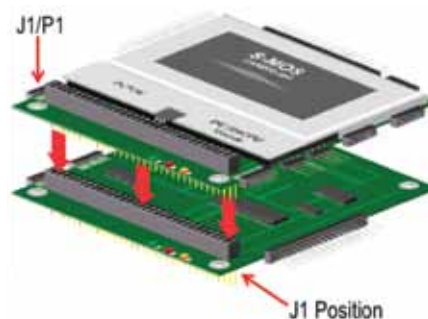
Medical

Transportation

Gaming

Product Specifications

Specifications	Product	Available upon request
	Signal Integrity data	Available upon request
Materials	Contacts	Phosphor bronze
	Platings	See Customer Drawings TS-2392 and TS-2395
	Housings	Polyester Nylon-6T (UL 94V-0)
Environmental	Operating Temperature	-40°C to +105°C (+85°C for bus compatible version)
	Max Processing Temp	230°C for 60 seconds 260°C for 10 seconds
Electrical	Current Rating	3 AMPS
	Insulation Resistance	5,000 Megaohms Min
	Contact Resistance	20 Milliohms Max
	Withstanding Voltage	1000 Vac



3M™ Connectors for PC104 Embedded Systems Applications

The following parts are available as part of the 3M backplane connector product family:

Part Number	Description	Customer Drawing
4P01-2A02-XX	PC104 Compliant Non-Stack-Thru, 40-Pin, Solder Tail Module, 11.3 to 19 mm Standoff	TS-2392
4P01-2B02-XX	PC104 Bus Compatible Stack-Thru, 40-Pin, Solder Tail Module, 11.3 to 19 mm Standoff	TS-2392
4P01-2C02-XX	PC104 Compliant Stack-Thru, 40-Pin, Solder Tail Module, 11.3 to 19 mm Standoff	TS-2392
4P01-2D02-XX	PC104 Compliant Stack-Thru, 40-Pin, Solder Tail Module, 11.3 to 19 mm Standoff	TS-2392
4P02-2A02-XX	PC104 Compliant Non-Stack-Thru, 64-Pin, Solder Tail Module, 11.3 to 19 mm Standoff	TS-2392
4P02-2B02-XX	PC104 Bus Compatible Stack-Thru, 64-Pin, Solder Tail Module, 11.3 to 19 mm Standoff	TS-2392
4P02-2C02-XX	PC104 Compliant Stack-Thru, 64-Pin, Solder Tail Module, 11.3 to 19 mm Standoff	TS-2392
4P02-2D02-XX	PC104 Compliant Stack-Thru, 64-Pin, Solder Tail Module, 11.3 to 19 mm Standoff	TS-2392
4P01-2J02-XX	PC104 Bus Compatible Non-Stack-Thru, 40-Pin, Solder Tail Module, >19.9 mm Standoff	TS-2393
4P01-2K02-XX	PC104 Bus Compatible Non-Stack-Thru, 40-Pin, Solder Tail Module, >19.9 mm Standoff	TS-2393
4P02-2J02-XX	PC104 Bus Compatible Non-Stack-Thru, 64-Pin, Solder Tail Module, >19.9 mm Standoff	TS-2393
4P02-2K02-XX	PC104 Bus Compatible Non-Stack-Thru, 64-Pin, Solder Tail Module, >19.9 mm Standoff	TS-2393
4P01-2E02-XX	PC104 Bus Compatible Non-Stack-Thru, 40-Pin, Solder Tail Module, 19.3 to 20 mm Standoff	TS-2394
4P01-2F02-XX	PC104 Bus Compatible Non-Stack-Thru, 40-Pin, Solder Tail Module, 19.3 to 20 mm Standoff	TS-2394
4P01-2G02-XX	PC104 Bus Compatible Non-Stack-Thru, 40-Pin, Solder Tail Module, 19.3 to 20 mm Standoff	TS-2394
4P01-2H02-XX	PC104 Bus Compatible Stack-Thru, 40-Pin, Solder Tail Module, 19.3 to 20 mm Standoff	TS-2394
4P02-2E02-XX	PC104 Bus Compatible Non-Stack-Thru, 64-Pin, Solder Tail Module, 19.3 to 20 mm Standoff	TS-2394
4P02-2F02-XX	PC104 Bus Compatible Non-Stack-Thru, 64-Pin, Solder Tail Module, 19.3 to 20 mm Standoff	TS-2394
4P02-2G02-XX	PC104 Bus Compatible Non-Stack-Thru, 64-Pin, Solder Tail Module, 19.3 to 20 mm Standoff	TS-2394
4P02-2H02-XX	PC104 Bus Compatible Stack-Thru, 64-Pin, Solder Tail Module, 19.3 to 20 mm Standoff	TS-2394
4P01-2L02-XX	PC104 Bus Compatible Non-Stack-Thru, 40-Pin, Solder Tail Module, >27.3 mm Standoff	TS-2395
4P02-2L02-XX	PC104 Bus Compatible Non-Stack-Thru, 64-Pin, Solder Tail Module, >27.3 mm Standoff	TS-2395

Additional Information

	J1/P1 Connector	J2/P2 Connector	J3/P3 Connector
Type of module	PC/104 module	PC/104 module	PC/104-Plus module
Bus Architecture	8-bit (ISA PC/AT)	16-bit (ISA PC/AT)	32-bit (PCI bus)
Description	2 rows of 40 pins - 0.100" (2.54 mm) pitch	2 rows of 64 pins - 0.100" (2.54 mm) pitch	4 rows of 120 pins - 2.00 mm pitch
Options	Stack-through and non-stack-through options	Stack-through and non-stack-through options	Stack-through and non-stack-through options
Customer Drawings	TS-2392, TS-2395	TS-2392, TS-2395	TS-2391

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