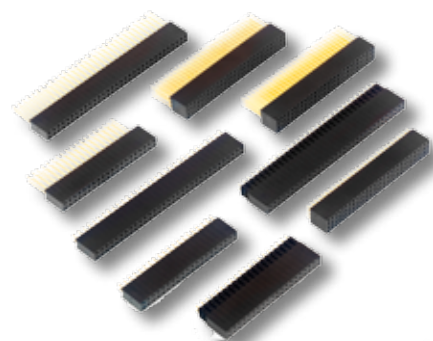


3M™ Connectors for PC104 Embedded Systems Applications

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

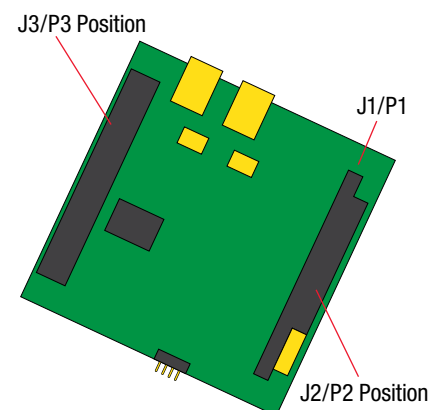
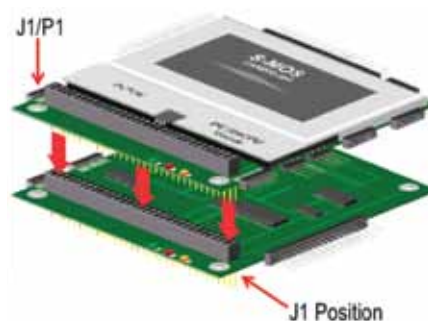
Medical

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

3M is a trademark of 3M Company.

Important Notice

All statements, technical information and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M's control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for the user's application.

Warranty; Limited Remedy; Limited Liability.

3M's product warranty is stated in its Product Literature available upon request. **3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. **Except where prohibited by law, 3M will not be liable for any indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.**



Electronic Solutions Division

Interconnect Products
6801 River Place Blvd.
Austin, TX 78726-9000
1-800-225-5373
www.3Mconnectors.com

Please recycle. Printed in USA.
© 3M 2011. All rights reserved.
80-4000-7008-4