

# 3M™ Connectors for MicroTCA™ Applications

3M is offering Power and Signal Connectors for MicroTCA Applications as an addition our embedded computing product line.

- **Power Connectors:** These pin and socket connectors conform to PICMG® MicroTCA.0 R1.0 standard requirements. They have 24 high-power contacts and 72 high-density signal contacts available in 6 mm and 2.25 mm contact widths.
- **Signal Connectors:** These mezzanine card backplane connectors conform to PICMG AdvancedMC.0 R2.0 standard requirements. They are available with and without alignment posts.



3M™ Power Connectors for MicroTCA™ Applications



3M™ Signal Connectors for MicroTCA™ Applications

## Features and Benefits

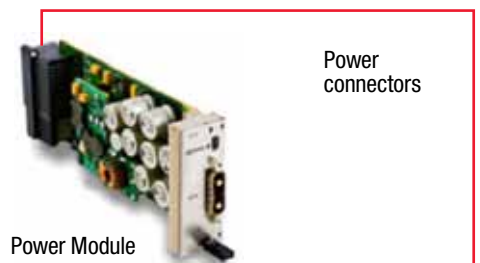
Power Connector	Signal Connector
Supports PICMG MicroTCA (AdvancedMC 1.0) specification	AdvancedMC™ Connector for MicroTCA Applications
24 high-power contacts and 72 high-density signal contacts	Card edge connector 170 positions
Backplane and daughtercard versions	Available with or without post
Press-fit termination	Press-fit termination; 0.75 mm pitch
Mating force: 145 N Max.; withdrawal force: 110 N Max.	Mating force: 100 N Max; Withdrawal force: 65 N Max
Supports 200 mating cycles	Superior signal integrity



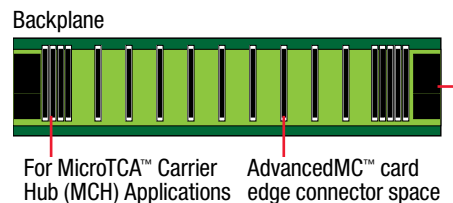
Plug Connector Module

## Target Markets and Applications

Telecom and networking-access products	Outdoor ruggedized applications
Fiber-to-the-premise applications	Traffic control boxes
Medical applications	Military/aerospace backplanes
Instrumentation and control systems	Designed for hot-swap applications



Power Module



For MicroTCA™ Carrier Hub (MCH) Applications



# 3M™ Connectors for MicroTCA™ Applications

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

Part Number	Description	Contact Positions	Customer Drawing
1P02-1110-AS	MicroTCA Backplane Header and Power Female Module	6.00 contact surfaces	TS-2366
1P01-1110-AS	MicroTCA Right Angle Socket and Power Male Module	6.00 contact surfaces	TS-2367
1P00-2000-KR	MicroTCA AMC Mezzanine Card Backplane Connector	Without alignment post	TS-2368
1P00-2001-KR	MicroTCA AMC Mezzanine Card Backplane Connector	With alignment post	TS-2368

## Product Specifications

		Power Connector	Signal Connector
<b>Specifications</b>	Product Signal Integrity Data	Available upon request Available upon request	Available upon request Available upon request
<b>Materials</b>	Contacts	Copper alloy, gold plating	Copper alloy
	Platings	0.76 µm Au / 0.38 µm PdNi+Au	0.76 µm Au
	Housings	Thermoplastic polyester, glass-filled (UL 94V-0)	High temperature thermoplastic (LCP) (UL 94V-0)
<b>Board</b>	Finished Diameter	NA	0.55 +/- 0.5 mm
	Thickness	NA	1.4 mm Min
<b>Mechanical</b>	Mating Force	145 N Max	100 N Max
	Withdrawal Force	110 N Max	65 N Max
	Durability	200 mating cycles	NA
<b>Electrical</b>	Current Rating	GND Conductor: 0.625A/pin Power Branch GNA Conductor: 11.625A/pin	NA
	Insulation Resistance	Signal GND Conductor: 25millionohms Power Branch GND Conductor: 5millionohms	NA
	Withstanding Voltage	80V r.m.s	NA

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