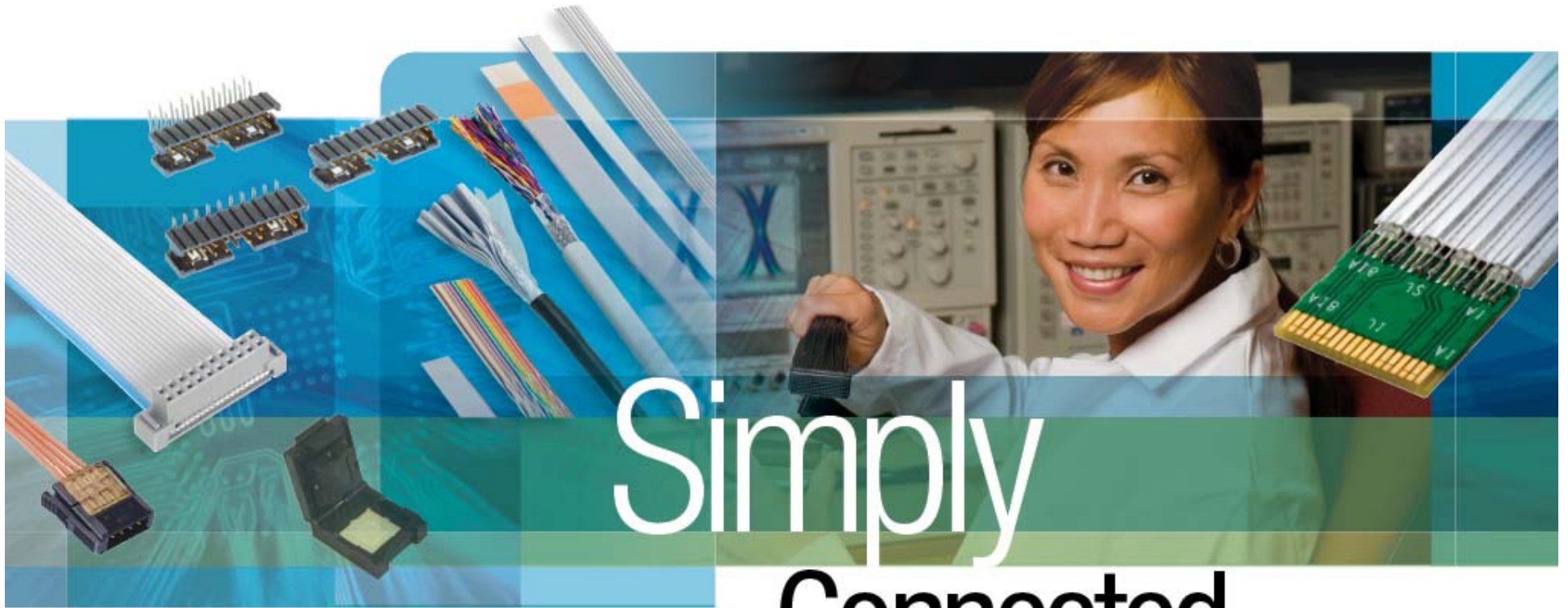


3M Electronic Solutions Division

3M™ Connectors for Embedded Systems

Connectors for AdvancedTCA®, CompactPCI® and MicroTCA™ Systems from 3M



Simply Connected



Introduction

- Purpose
 - *To explain the features and benefits of the connectors for Embedded Computer Systems*
- Objectives
 - *Highlight the key features and describe applications*
- Content
 - *11 pages*
- Learning Time
 - *7 minutes*



Overview

- 3M has expanded its range of connectors for open modular computers meeting PICMG[®] specifications:
 - *CompactPCI[®] (cPCI) Systems*
 - *AdvancedTCA[®] (ATCA) Systems*
 - *Advanced Telecommunications Computing Architecture*
 - *MicroTCA[™] Systems/ μ TCA[®]*
 - *Micro Telecommunications Computing Architecture*



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CompactPCI®

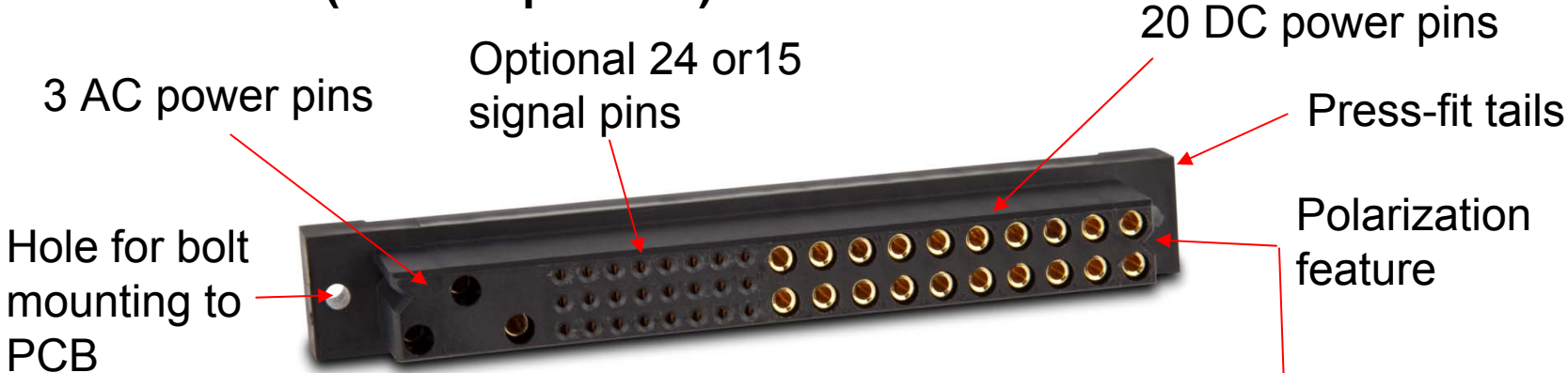


**Open Modular
Computing Specifications**

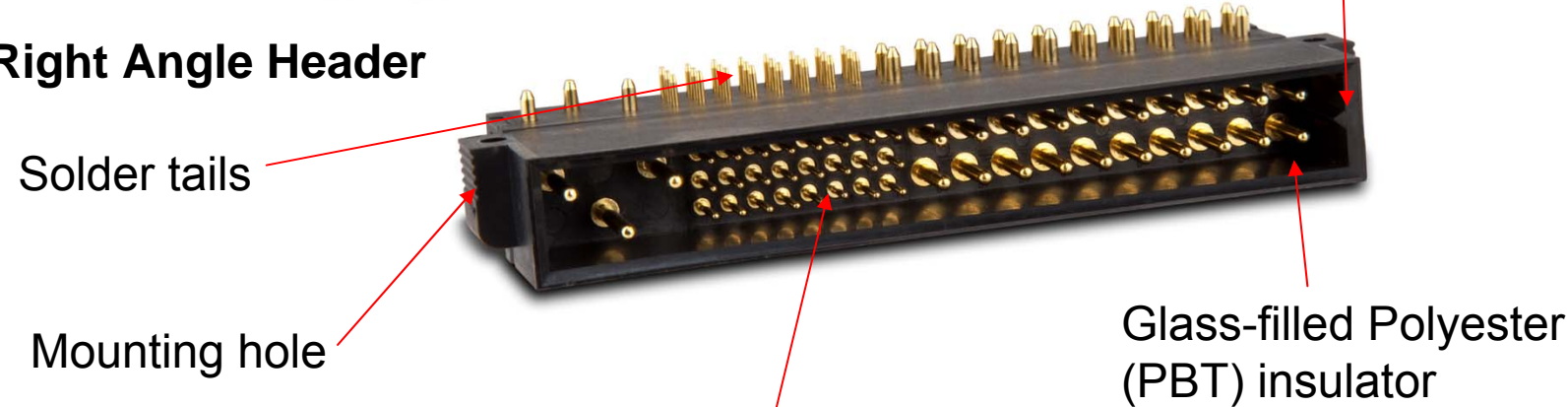


3M™ Power Connector Anatomy

Vertical Socket (38 or 47 position)



Right Angle Header



RoHS compliant*

.76 µm gold plated copper alloy contacts



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AdvancedTCA®

AdvancedTCA®

Celebrating



2001 - 2011



3M™ Power Connector Anatomy

Vertical Socket (22, 30, and 34 position available)

8 AC power contacts

8 DC power contacts

26 signal contacts

Alignment features

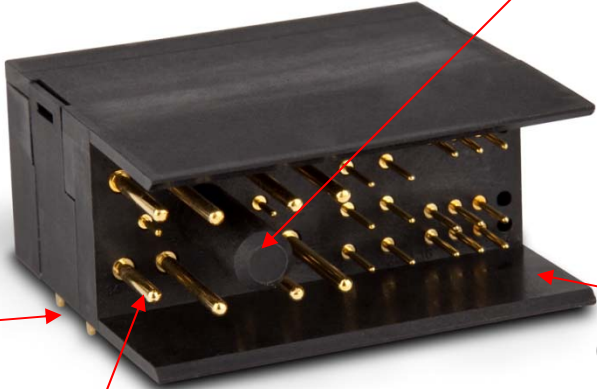


Right Angle Header

Press-fit tails

Glass-filled Polyester (PBT) insulator

.76 µm gold plated copper alloy contacts



RoHS compliant*



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μ TCA®

μ TCA®



3M™ Mezzanine Card Connector Anatomy

Vertical Cardedge (170 position)

Slot for plug-in module attachment

170 signal pins

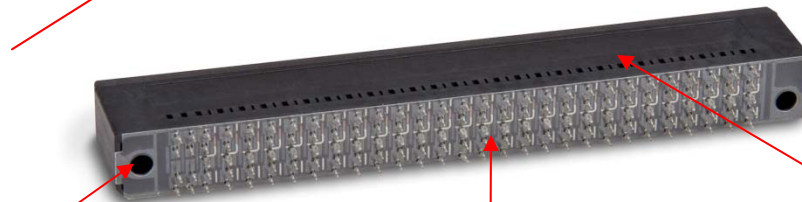
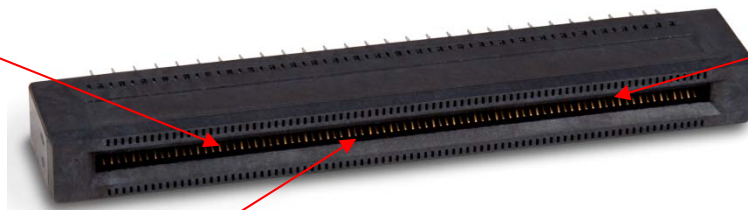
.76 μm gold plated copper alloy contacts

Optional mounting holes or guide posts available

High-temperature thermoplastic insulator

Press-fit tails

RoHS compliant*



3M™ Power Connector Anatomy

Vertical (96 position)

72 signal pins

.76 µm gold plated copper alloy contacts

Alignment features

Right Angle

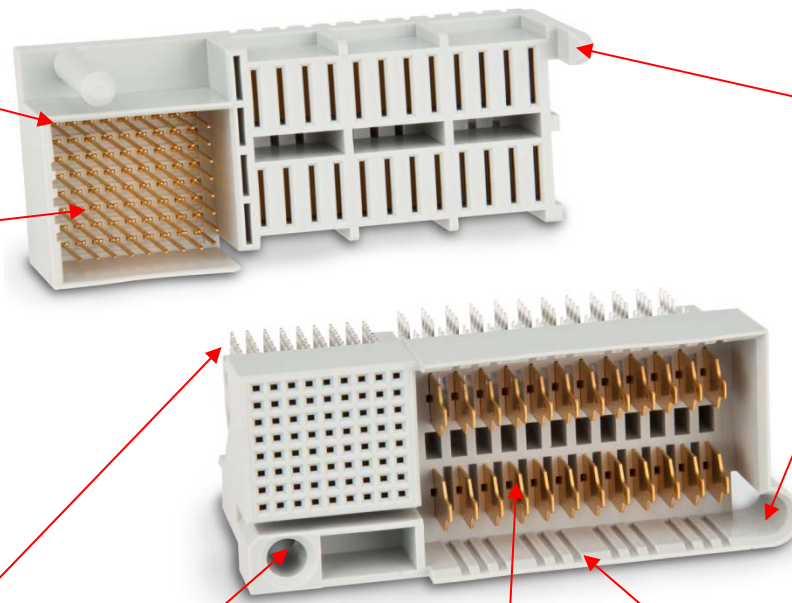
Press-fit tails

Receptor for alignment post

24 DC power pins

Glass-filled thermo-plastic Polyester insulator

RoHS compliant*



Summary

- New PICMG® compliant connectors from 3M for
 - *CompactPCI® (cPCI) Systems*
 - *38 and 47 position signal/power connectors*
 - *AdvancedTCA® (ATCA) Systems*
 - *22, 30, and 34 position signal/power connectors*
 - *MicroTCA™ Systems/μTCA®*
 - *170 position mezzanine and 96 signal/power connectors*
- Mating vertical and right angle versions
- PCB mounting and alignment features
- RoHS compliant*



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