

## M-Series™ 56

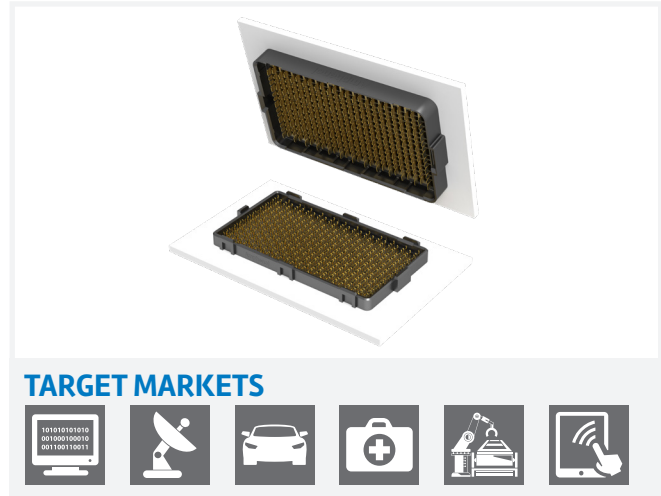
### 56GB/S HIGH SPEED MEZZANINE BGA CONNECTOR SYSTEM

Leveraging proven technologies, including an industry leading BGA design, offering superior self-aligning and self-leveling. With a next generation differential pair contact design for up to 56Gb/s PAM4 and NRZ performance.

- High density, high speed, dual-point contacts
- Self-aligning/leveling for multiple connector use
- 1.6mm column to column pitch
- 56Gb/s PAM4 and NRZ
- Stack Heights: 5mm-10mm

#### FEATURES

- Dedicated 85Ω and 100Ω Designs
- 22+ year old solder joint reliability per IPC-SM-785
- Industry-leading self-alignment
- Integrated pin protection on receptacle connector
- Proven contact mating beam geometries with 2-pts of contact



#### TARGET MARKETS



#### BENEFITS

- Impedance matched for optimal performance
- Quality and Reliability
- Supports multiple connector applications
- Durable mating interface design eliminates bent pins
- Reliable performance through shock and vibration

## ▶ M-Series™ 56

# TECHNICAL INFORMATION

## MATERIAL

- Housing: Liquid crystal polymer
- Contact Base Metal: Copper alloy
- Solder Spheres: 95.5Sn/4Ag/0.5Cu

## ELECTRICAL PERFORMANCE

- Insulation Resistance: 1000MΩ min
- Dielectric withstanding voltage: 2000V AC max  
1.5A < 30°C Δ T (all contacts energized)

## PART NUMBERS

### DESCRIPTION

M-Series™ 56 Receptacle, 4mm, 4Px25C, 100DP, 325pin 100Ω

M-Series™ 56 Plug, 1mm, 4Px25C, 100DP, 325pin 100Ω

### PART NUMBER

10145704

10145700

## MECHANICAL PERFORMANCE

- Durability: 100 mating cycles
- Contact Wipe: 1.0mm nominal

## ENVIRONMENTAL

- Pb Free
- Be Free

## PACKAGING

- Tape and Reel

## TARGET MARKETS/APPLICATIONS



Router and Servers  
Data Center  
Network



Telecom  
Datacom  
Switches and Routers



Car Navigation Systems



Imaging



Gaming Machine  
Test Equipment



Entertainment PC