



The Road Runner family of products is Meritec's innovative solution for high-speed, high-density co-planar board-to-board interconnect, capable of 1000 single-ended signals per connector with the density of over 114 signals per linear inch.

## Features & Benefits

- Connector system includes Power Wafers (three buses per wafer), and Data Wafers (nine single-mode signals per wafer) and can be arranged per Customer's requirements.
- The contact geometry, shield and insulator in each wafer are designed to control impedance and minimize crosstalk.
- The modular system allows the wafers to be replaced for field repair.
- Eliminates the need for large multi-layer PCBs.
- Allows smaller PCB's to be joined as if one.
- The hermaphroditic contact has redundant points-of-contact per line and a shallow insertion-force profile that reduces mating forces while maintaining high normal forces.
- The press-fit PCB interface is a "lanced pin" providing more compliance than an "eye-of-the-needle" configuration.
- Achievable Density of 50 differential pairs or up to 114 single-ended signals per linear inch.
- The Connector is hermaphroditic and mates with an identical part number.

## Specifications

### Electrical

- High-speed-signal transmission: > 2.5 Gb/s
- Zo: 50/100 ohms
- Dielectric-withstanding voltage: 1000 Vrms
- Insulation Resistance: 10,000 megohm
- Current rating ground and signal pins: 1 amp
- Current rating per Power Bus in Power Wafer: 5 amp
- Crosstalk: < 3.5 to 5% forward and backward, multiline including vias

### Mechanical

- Contact and shield material: Copper Alloy
- Number of contacts: 186
- Standard contact finish: selective 30-µin Au over Ni
- Contact durability: 10,000 cycles
- Dielectric material: liquid-crystal polymer (LCP)

### Environmental

- Material: UL 94V-0 Recognized



