



THERMAL BRIDGE TECHNOLOGY

FOR INPUT/OUTPUT (I/O) APPLICATIONS

Thermal bridge technology is the latest thermal innovation from TE Connectivity (TE) and provides up to 2x better thermal resistance over traditional thermal technologies such as gap pads or thermal pads. This solution was developed by TE as our customers seek ways to dissipate more heat associated with increasing power requirements, specifically in applications with restricted airflow, liquid cooling or cold plate applications.

In addition to superior thermal performance over comparable thermal solutions in the market, thermal bridge technology provides better reliability thanks to an elastic compression design that is resistant to set and relaxation over time. This helps ensure consistent, longer-lasting performance and reduces component replacement during servicing.

APPLICATIONS

- High performance computing (HPC)
- Ethernet switches
- 5G/wireless
- Servers
- Ethernet SP routing
- Chip set cooling

KEY BENEFITS

- 2x better thermal resistance
- Better reliability and durability
- Improved application serviceability

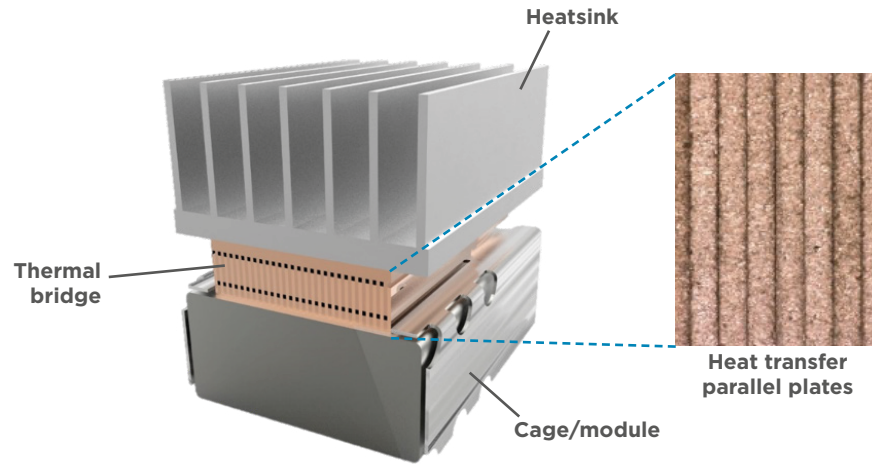
PRODUCT SPECIFICATION

- Document #: [108-130042](#)

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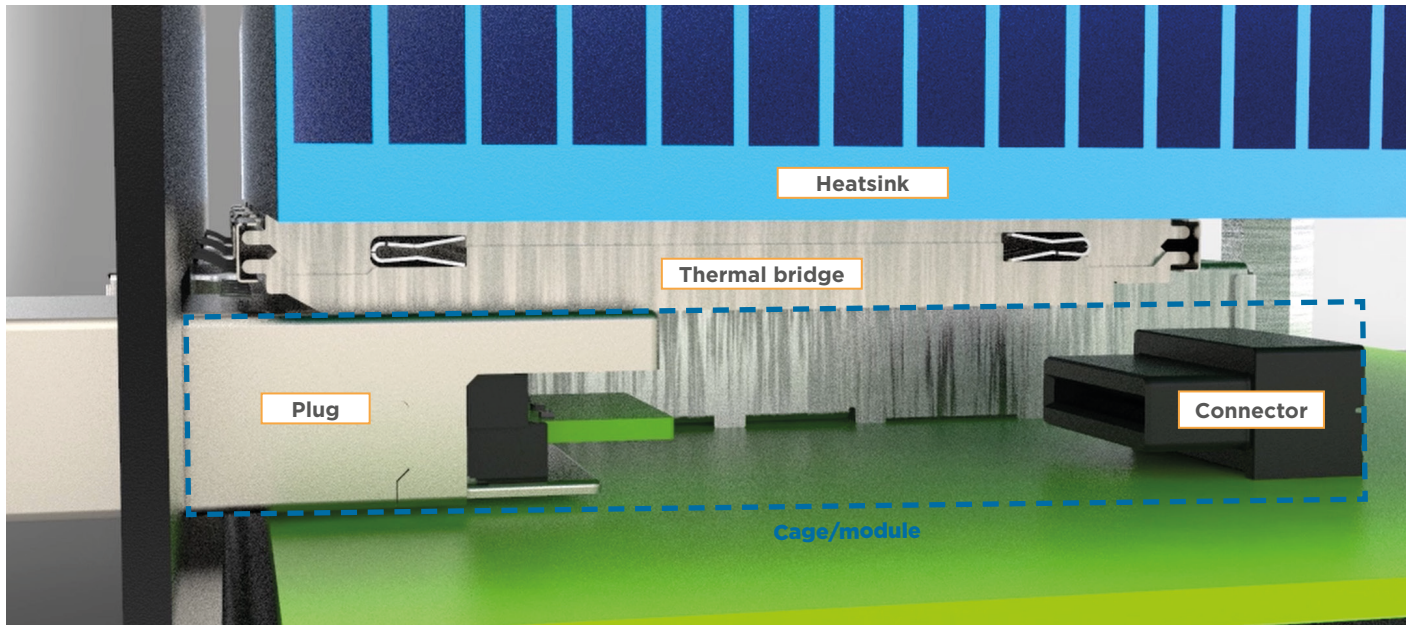
HOW THERMAL BRIDGE WORKS

- An interleaved series of highly parallel plates allows heat to pass from the I/O module to the cooling area
- Integrated mechanical springs provide interface force and 1.0 mm of compression travel
- Near-zero plate gap for compressibility and thermal transfer
- Comes pre-assembled on I/O cage
- Interface may be greased (optional)








TECHNICAL FEATURES & BENEFITS

- Spring loaded bridge offers 1.0mm (typical) of z-axis compression
- Individual plate actuation allows for surface conformability in the x-axis
- Dual-spring design allows for tilt conformability in the y-axis
- At 3 points of contact per plate, a typical bridge will have 150+ points of contact to adjacent surface
- Dry interface resistance 20-40% lower than most traditional riding heatsinks



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AVAILABLE CAGE ASSEMBLIES WITH THERMAL BRIDGE

TE Part Number	Form Factor	Configuration	Image
2358986-1	SFP+	1x1	
2354751-1	QSFP-DD	1x1	
2359309-1	QSFP28	1x1	
2354935-1	QSFP28	1x4	
2355519-1	QSFP28	1x6	

Contact TE for custom design options.

te.com/thermalbridge

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