

# **SLIVER INTERNAL CABLED INTERCONNECT SOLUTION**

## **Connectors and Cable Assemblies**

Due to the latest high speed demands in networking equipment TE Connectivity (TE) has developed the new Sliver internal cabled interconnect which provides one of the most flexible solutions in the market for making internal I/O connections on the board. Sliver products can be used across many applications, data rates and protocols (PCI Express, SAS, Ethernet).

With a 0.6mm contact pitch, Sliver products are super slim, allowing you to fit more inside the box. TE provides a highly robust metal housing design on the connector cage with an active latch providing additional connection security.

This new technology simplifies design and helps lower overall costs by eliminating the need for re-timers and more costly lower-loss PCB materials while reaching speeds up to 25 Gbps with the use of TE high speed cable.

### Applications

- Data center & Networking Equipment
  - Servers
  - Switches
  - Routers
  - High Performance Computing (HPC)
  - Storage Devices
  - Wireless Base Stations and Radios

- Internal Cabled Solution Options
  - Chip to Chip
  - Chip to I/O
  - Chip to Backplane
  - Board to Board
- PCB Card Edge (BTB) solutions
- Supports Ethernet, PCIe, SAS, SATA, InfiniBand, and other custom protocols

#### Ultimate flexibility in applications, data rates and protocols

Vertical and right angle connector and cable solutions provide a flexible solution set in addition to allowing for both cabled and card-edge interconnect designs.

With a flexible pinout arrangement, multiple mounting and mating options, and the support of present and future data rate protocols, the Sliver interconnect solution provides a variety of configuration options to address your application needs.

#### Free up design space

The 0.6mm contact pitch is up to 30% denser than most existing solutions, allowing you to fit more inside the box.

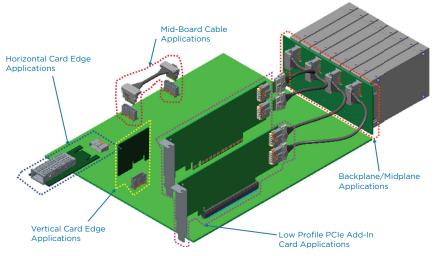
#### **Reliable connections**

The Sliver interconnect solution provides a robust connector housing design while an active latch provides additional connection security for data critical applications.

#### Lower design costs

Sliver connector and cable assemblies can lower overall costs by eliminating the need for re-timers and more costly lower loss PCB materials.

#### **Application design flexibility**



TE's Sliver interconnect solution consists of:







#### **Key Features**

- 0.6mm pitch SMT connector design includes robust metal housing
- 12G and 25G high speed, low-loss 33AWG cable
- Vertical and right angle configurations with active latch
- Supports 85 and 100 ohm impedance applications
- Flexible pinout arrangement allows for mix of differential signal pairs and low speed single-ended sidebands
- Flexible mounting and mating arrangements:
  - Cabled interconnects
  - Card edge interconnects
  - Vertical to right-angle, vertical to straight, right-angle to rightangle, and right-angle to straight receptacle-to-plug mating
- Developing the platform to be scalable in x4 Tx/Rx lane increments:
  - x4 (26pin), x8 (50pin), x12 (74pin), x16 (100pin), x20 (124pin), x24 (148pin)
- Supports present and future bandwidth needs without requiring requalification and redesign

#### **Part Number Details**

#### Connectors

	TE Part Numbers				
Part Description	50 Position	74 Position	124 Position		
Vertical PCB Connector	2292096-1	2291316-1			
Right Angle PCB Connector	2292055-1	2292069-1	2294190-1		
	148 Position				
Vertical PCB Card Edge Connector	2297117-1				

#### **Cable Assemblies**

					TE Part Numbers		
				50 Pc	osition	74 Pc	sition
Part Description	Data Rate	Impedance	Bulk Cable	0.5 Meter	1 Meter	0.5 Meter	1 Meter
Straight Cable Plug	25G	85	Discrete pairs	2821742-1	2821742-2	2821376-1	2821376-2
Right Angle Plug	25G	85	Discrete pairs	2821743-1	2821743-2	2821745-1	2821745-2
Straight-Right Angle Plugs	25G	85	Discrete pairs	2821744-1	2821744-2	2821746-1	2821746-2
Straight Cable Plug	25G	100	Discrete pairs	2821750-1	2821750-2	2821756-1	2821756-2
Right Angle Plug	25G	100	Discrete pairs	2821751-1	2821751-2	2821757-1	2821757-2
Straight-Right Angle Plugs	25G	100	Discrete pairs	2821752-1	2821752-2	2821758-1	2821758-2
Straight Cable Plug	12G	85	Ribbon	2820397-1	2820397-2	2820396-1	2820396-2
Right Angle Plug	12G	85	Ribbon	2820399-1	2820399-2	2821385-1	2821385-2
Straight-Right Angle Plugs*	12G	85	Ribbon	2821638-1	2821638-2	2821639-1	2821639-2
Straight Cable Plug	12G	100	Ribbon	2821747-1	2821747-2	2821753-1	2821753-2
Right Angle Plug	12G	100	Ribbon	2821748-1	2821748-2	2821754-1	2821754-2
Straight-Right Angle Plugs	12G	100	Ribbon	2821749-1	2821749-2	2821755-1	2821755-2

\*Discrete pairs are optional for 12G platform

Contact your TE representative about customer cable assembly configurations.

#### **TE Technical Support Center**

USA:	1.800.522.6752
Canada:	1.905.475.6222
Mexico:	52.0.55.1106.0800
Latin/S. America	: 54.0.11.4733.2200
Germany:	49.0.6251.133.1999
UK:	44.0.800.267666
France:	33.0.1.3420.8686
Netherlands:	31.0.73.6246.999
China:	86.0.400.820.6015

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