#### FEATURES AND SPECIFICATIONS



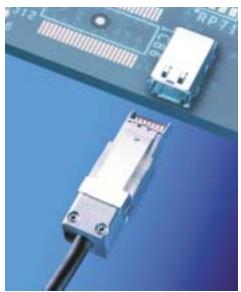
Molex manufactures a complete line of interconnect solutions featuring the High Speed Serial Data Connector 2 (HSSDC2) interface. HSSDC2 is a high performance cable-to-board system with seven high-speed contacts to transfer data rates of 2.5Gbps for InfiniBand\*, Fibre Channel and Gigabit Ethernet applications. The system has enhanced capabilities of up to 5 Gbps for next-generation designs.

The HSSDC2 family provides improved electrical performance and space savings compared to the standard HSSDC product and has been specified by the InfiniBand Trade Association for 1X I/O applications. HSSDC2 is also supporting many Fibre Channel and Gigabit Ethernet applications including server I/O chassis, switches and network adapters for storage arrays. Our unique keying design prevents mismating cable assemblies between the various protocols.

The HSSDC2 system consists of a right-angle shielded receptacle with a positive locking feature, offering six chassisground locations, six PCB grounding and retention contacts, four plug-to-receptacle grounding contacts and a metal EMI/RFI shield.

The HSSDC2 system also includes a latching cable plug which accepts wire gauges from 22-30AWG. Cable assemblies are available in a variety of lengths up to 17.00m (56'). A pluggable HSSDC2 copper module attaches cable assemblies into Small Form-factor Pluggable (SFP) connectors and cages on host equipment.

The system is designed for a durability of 250 cycles, utilizing 1.27micron (.050µ") gold-over-nickel plating on signal contacts. Receptacles feature SMT leads with a 0.15mm (.006") tail-to-tail coplanarity. Options include a drop-in or press-fit shield design and tape-and-reel or tray packaging to accommodate either hand placement or robotic attachment to the PCB.



# **FEATURES AND BENEFITS**

## HSSDC2 Shielded Receptacle (74703)

- Six chassis ground locations, six PCB ground/retention contacts, and four plug-toreceptacle grounding points on shield to minimize EMI/RFI
- Positive locking interface to prevent accidental disengagement
- Keyed to mating plug connector for polarization
- Solderable "drop-in" or "press-fit" shield options to facilitate processing

#### HSSDC2 Adapter Receptacle (74704)

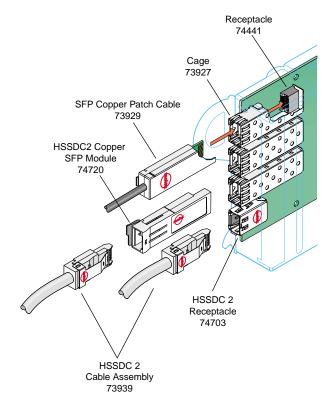
- Designed for use in manufacturing Small Form-factor Pluggable (SFP) copper modules
- Stepped housing design provides datum surfaces for positive connector placement on PCB
- Plastic locating pegs orient part to PCB
- Flat-top housing and tape-and-reel packaging optimize robotic handling

# HSSDC2 Copper Pluggable Modules (74720)

- Robust zinc die-cast body for EMI and mechanical protection
- Raised ribs ensure electrical contact with SFP cage to minimize EMI/RFI
- Spring-loaded latch for user-friendly installation and pluggability
- Supports serial ID functionality

#### HSSDC2 Cable Assemblies (73939)

- Cables manufactured to meet or exceed electrical performance requirements
- Rugged positive latching to prevent accidental disengagement
- 360-degree shielding around connector for EMI protection
- Equalized and unequalized versions available in various lengths up to 17.00m (56')



HSSCD2 products are often used with SFP cages and host receptacles

<sup>\*</sup> InfiniBand is a trademark of the InfiniBand<sup>SM</sup> Trade Association

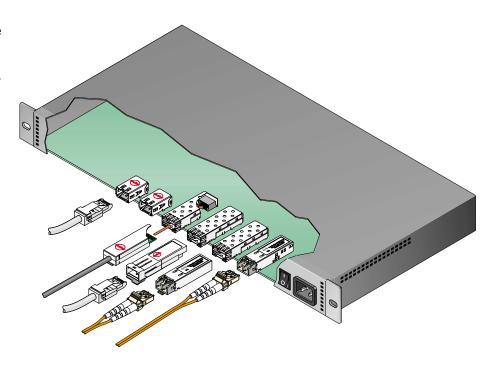
# **APPLICATIONS**



The High Speed Serial Data Connector 2 (HSSDC2) product family improves electrical performance and minimizes space usage for leading edge data-transfer protocols, including Fibre Channel, InfiniBand\* and Gigabit Ethernet.

Applications for HSSDC2 products include I/O for networking and storage devices, often accompanied by Small Form-factor Pluggable (SFP) products:

- Network switches
- Routers
- Servers
- Storage devices
- Network Interface Cards (NICs)
- Host Adapter Cards (HBAs)



### ORDERING INFORMATION

Product	Options		Order No.
Shielded Receptacle	Tape-and-reel packaging	InfiniBand keying, drop-in shield	74703-0007
		InfiniBand keying, press-fit shield	74703-0307
		Fibre Channel keying, drop-in shield	74703-0107
		Fibre Channel keying, press-fit shield	74703-0407
	Tray packaging	InfiniBand keying, drop-in shield	74703-0017
		InfiniBand keying, press-fit shield	74703-0317
		Fibre Channel keying, drop-in shield	74703-0117
		Fibre Channel keying, press-fit shield	74703-0417
Adapter Receptacle	Tape-and-reel packaging	Unshielded	74704-0001
SFP Copper Pluggable Module	Active transceiver	InfiniBand, 100 ohm, without serial ID	74720-0101
		InfiniBand, 100 ohm, with serial ID	74720-0102
		Fibre Channel, 150 ohm, without serial ID	74720-0201
		Fibre Channel, 150 ohm, with serial ID	74720-0202
Cable Assemblies	Custom lengths available	Unequalized	73939-1XXX
		Equalized	73939-2XXX

<sup>\*</sup> InfiniBand is a trademark of the InfiniBand<sup>SM</sup> Trade Association

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