# **STORAGE INTERFACE SOLUTIONS PART 1**

# STORAGE SOLUTION INFORMATION

- Web links to product info including performance parameters, drawings, 3D models, etc
  - www.fci.com

#### Documentation

- Storage Interface Connectors
- Disc Drive Interface Connectors
- Products for Micro TCA and Advanced MC modules
- Documentation available at www.fci.com

### SERIAL-ATTACHED SCSI CONNECTORS

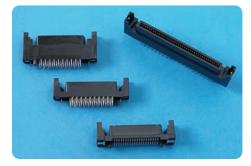
- SAS Vertical Receptacles
- SAS Right-Angle Receptacles
- SAS Headers



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# **SCA-2 CONNECTORS**

- SCA-2 Vertical Receptacles
- SCA-2 Right-Angle Headers



# SERIAL-ATA CONNECTORS

- SATA Vertical Receptacles
- SATA Right-Angle Receptacles
- SATA Headers



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## STORAGE SOLUTIONS INFORMATION

- TheSAS connectors conform to SFF-8482 and enable the implementation of the Serial Attached SCSI hard disk drive interface. A SAS receptacle accepts either SAS or SATA drives, giving users the option of deploying higher-performance SAS drives for mission-critical applications or cost-effective SATA drives for bulk storage.
- The 22-position SATA connectors can be used extend the use of low-cost, high-capacity SATA drives to low-end enterprise storage applications in servers and storage systems. The SATA receptacle accepts a SATA drive, but is keyed to block the installation of a SAS drive.
- The SCA2 (Single Connect Attachment-2) connector system enables the hard disk drive to backplane interface for FibreChannel and SCSI. The 40-position backplane receptacles are designed to accept Fibre Channel drives, while 80-position receptacles accept SCSI drives. The interface is governed by SFF-8451 and SFF-8454.

## SAS SOLUTIONS MATRIX

Part Number	Termination Type			Other Features	
	Power	Port 2	Port 1		
10039748-001LF*	thru-ho	thru-hole, staggered footprint		wide base with forklock retainers	
10018182-001LF	thru-hole, in-line footprint		otprint	with forklock retainers	
10038064-001LF*	press-fit, staggered footprint		ootprint	wide base with molded posts and forklock/harpoon retainers	
10045782-001LF	press-fit, staggered footprint		ootprint	full-length, wide base with molded posts	
10031077-003LF	press-fit, in-line footprint		otprint	with forklock/harpoon retainers	
10036876-003LF*	thru-hole,	SMT	signals: SMT	wide base with molded posts and solder tab	
	staggered		grounds: thru-hole	retainers, hybrid termination	
10039845-001LF *	SMT			wide base with molded posts and solder tab retainers	
10031567-001LF	SMT			with molded posts and SMT retainers	
10038334-001LF	SMT		SMT 17.85mm extended height with		
				molded posts and SMT retainers	

SAS I	leader for Int	Complementary Receptacle			
SAS Header	Orientation	Termination	Other Features	Receptacle	Receptacle
Part Number		Туре		Part Number	Interface
10045105-001LF	vertical	SMT	rivet holes for PCB attachment	10045103-001LF	SATA
10045105-001LF	vertical	SMT	rivet holes for PCB attachment	10045103-002LF	SATA
10034524-001LF	right-angle	SMT	forklocks for PCB attachment		
			SATA port away from PCB	10031569-001LF	SATA
10034524-001LF	right-angle	SMT	forklocks for PCB attachment	10035202-001LF	SAS
			port 1 (SATA) away from PCB		

Termination	Offset from Surface	Other Features
Туре	of Carrier PCB*	
SMT	7.07mm	port 1 (SATA) toward PCB, with molded posts and
		forklocks for 1.6mm thick host PCB
SMT	7.07mm	port 1 (SATA) toward PCB, with molded posts and solder-tab retainers
SMT	7.07mm	port 1 (SATA) toward PCB, with molded posts
		and forklocks for 1.8-1.93mm thick host PCB
SMT	7.07mm	port 1 (SATA) toward PCB, with molded posts and
		longer forklocks for 1.8-2.2mm thick PCB
SMT	0.35mm	port 1 (SATA) away from PCB, with forklocks
SMT	0.93mm	port 1 (SATA) toward PCB, with solder-tab retainers
	Type SMT SMT SMT SMT SMT	Type of Carrier PCB*   SMT 7.07mm   SMT 7.07mm   SMT 7.07mm   SMT 7.07mm   SMT 7.07mm   SMT 0.35mm

#### **SCA-2 SOLUTIONS MATRIX**

HDD Interface	Number of Contacts	Connector Type	Orientation	Receptacle Body Height	Termination Type	Base Number
Fibre Channel	40	receptacle	vertical	11.5mm	through-hole solder	71781
Fibre Channel	40	receptacle	vertical	11.5mm	press-fit	87567
Fibre Channel *	40	receptacle*	vertical	11.5mm	surface-mount	10038339
Fibre Channel	40	receptacle	vertical	17.5mm	through-hole solder	72437
Fibre Channel	40	receptacle	vertical	17.5mm	press-fit	72443
Fibre Channel	40	plug	right-angle	N/A	straddle-mount	72547
SCSI	80	receptacle	vertical	11.5mm	through-hole solder	71780
SCSI	80	receptacle	vertical	11.5mm	press-fit	87566
SCSI	80	receptacle	vertical	17.5mm	through-hole solder	72436
SCSI	80	receptacle	vertical	17.5mm	press-fit	72442
SCSI	80	plug	right-angle	N/A	straddle-mount	71292

#### SATA SOLUTIONS MATRIX

Part Number	Termination Type				Other Features	
	Powe	ər	Signals			
10017660-001LF		thru-ho	thru-hole, in-line		with forklock/harpoon retainers	
10017660-002LF	thru-hole, st	aggered	thru-hol	e, in-line	with forklock/harpoon retainers	
10022676-001LF		press-f	it, in-line		with forklock/harpoon retainers	
10022676-002LF	press-fit, sta	aggered	press-fi	t, in-line	with forklock/harpoon retainers	
10029065-001LF		SMT,	in-line		with molded posts and solder tab retainers	
10042140-001LF		SMT,	in-line		with molded posts and solder tab retainers	
10043820-001LF	solder tab, in-line				cable connector	
10045103-001LF	SMT, in-line				8.15mm height, rivet for PCB attachment	
10045103-002LF		SMT, in-line			8.45mm height, rivet for PCB attachment	
Part Number	Termination Type		set from Surface Other Features		Other Features	
10031569-001LF	SMT	0.3	0.35mm SATA c		port away from PCB, with molded posts and forklocks	
10029364-001LF	SMT	2.6			A port toward PCB, with molded posts and forklocks	
10034814-001LF	SMT	3.7	3.75mm SATA		ATA away from PCB, with molded posts and forklocks	
Part Number	Orientation		Termination Type Power Signals		Other Features	
10039651-001LF	right-angle		SMT		with molded posts and forklocks	

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