

# STORAGE INTERFACE SOLUTIONS PART 1



## STORAGE SOLUTION INFORMATION

- Documentation
  - Storage Interface Connectors
  - Disc Drive Interface Connectors
  - Products for Micro TCA and Advanced MC modules

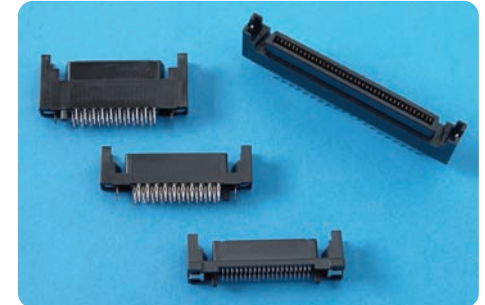
## SERIAL-ATTACHED SCSI CONNECTORS

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



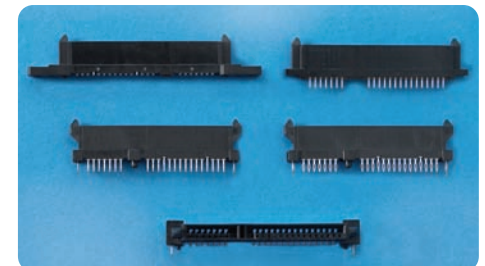
## SCA-2 CONNECTORS

- 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

- The SAS 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.

## SATA SOLUTIONS MATRIX

Part Number	Termination Type		Other Features
	Power	Signals	
10017660-001LF	thru-hole, in-line		with forklock/harpoon retainers
10017660-002LF	thru-hole, staggered	thru-hole, in-line	with forklock/harpoon retainers
10022676-001LF	press-fit, in-line		with forklock/harpoon retainers
10022676-002LF	press-fit, staggered	press-fit, 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	Offset from Surface of Carrier PCB*	Other Features
10031569-001LF	SMT	0.35mm	SATA port away from PCB, with molded posts and forklocks
10029364-001LF	SMT	2.67mm	SATA port toward PCB, with molded posts and forklocks
10034814-001LF	SMT	3.75mm	SATA away from PCB, with molded posts and forklocks

Part Number	Orientation	Termination Type		Other Features
		Power	Signals	
10039651-001LF	right-angle	SMT		with molded posts and forklocks

## SAS SOLUTIONS MATRIX

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

SAS Header for Interposer or Drive Carrier Assembly				Complementary Receptacle	
SAS Header Part Number	Orientation	Termination Type	Other Features	Receptacle Part Number	Receptacle 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 port 1 (SATA) away from PCB	10035202-001LF	SAS

Part Number	Termination Type	Offset from Surface of Carrier PCB*	Other Features
10044002-001LF	SMT	7.07mm	port 1 (SATA) toward PCB, with molded posts and forklocks for 1.6mm thick host PCB
10044002-002LF	SMT	7.07mm	port 1 (SATA) toward PCB, with molded posts and solder-tab retainers
10044002-003LF	SMT	7.07mm	port 1 (SATA) toward PCB, with molded posts and forklocks for 1.8-1.93mm thick host PCB
10044002-004LF	SMT	7.07mm	port 1 (SATA) toward PCB, with molded posts and longer forklocks for 1.8-2.2mm thick PCB
10035202-001LF	SMT	0.35mm	port 1 (SATA) away from PCB, with forklocks
10036587-001LF	SMT	0.93mm	port 1 (SATA) toward PCB, with solder-tab retainers

## 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