Storage Connectors

Product Presentation

FCi

Storage Drive Connectors – Product Range

FCI

FCI offers a wide range of connector options to support the industry-standard interfaces between storage drives (HDD, SSD, ODD) and the backplanes, midplanes or drive carrier boards commonly used in storage applications in PCs, servers and storage systems.

www.fci.com/products/storage

Serial Attached SCSI (SAS)/PCI-e
- 29/68 Pos Receptacle/Header
- Right-Angle or Vertical
- SMT/Press-Fit/Through-Hole
- Capable up to 12 Gb/s

Single Connect Attachment 2 (SCA-2)
- 40/80P Pos Receptacle/Header
- Fibre Channel or SCSI drives
- Capable up to 12 Gb/s

Slimline SATA
- 13 Pos Receptacle/Header
- Used for optical drive system.

Single Connect Attachment 2 (SCA-2
- eSATA or eSATA/USB
- For connection between PC & external SATA drive.

Serial ATA (SATA)
- 22 Pos Receptacle/Header
- Right-Angle or Vertical
- SMT/Press-Fit/Through-Hole
- Capable up to 6 Gb/s

Information Versatile Disk for Removable (iVDR)
- Plug & Receptacle
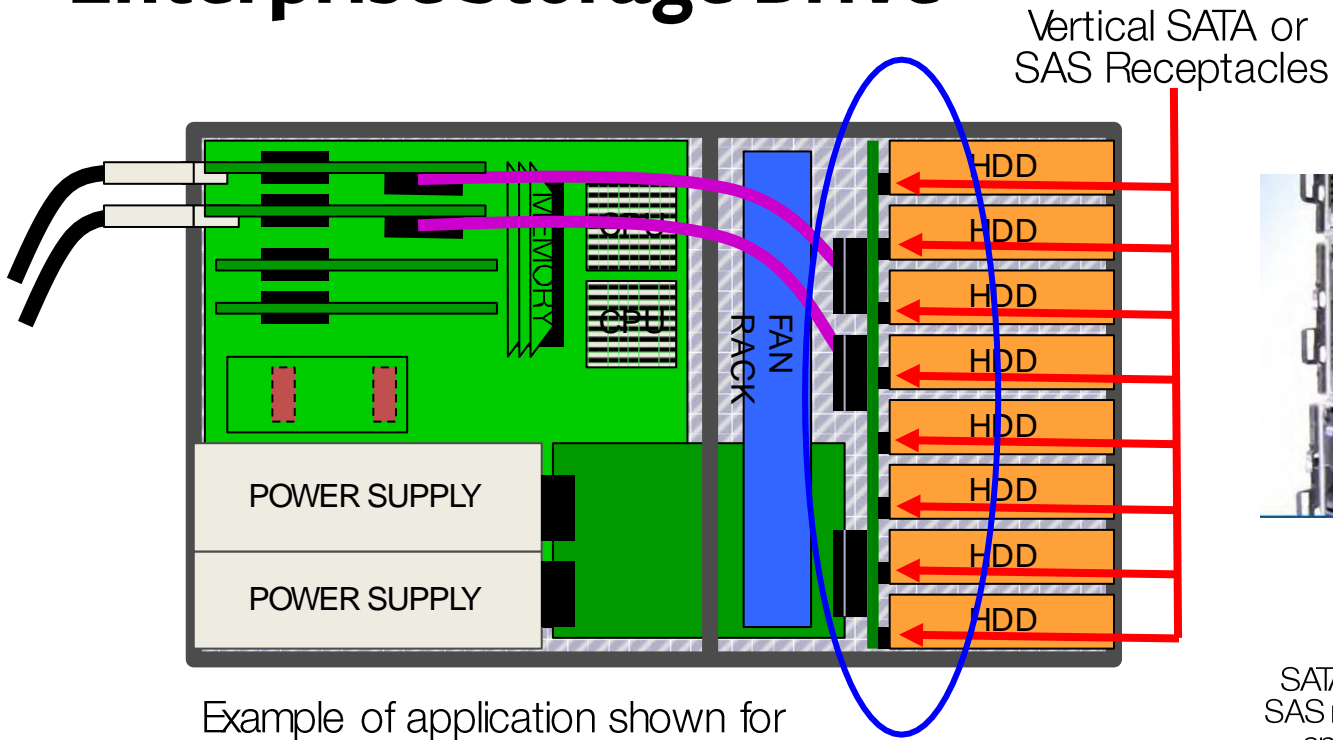- Between host system & iVDR media (HDD/SSD)

Micro-SATA
- 16 Pos Receptacle/Header
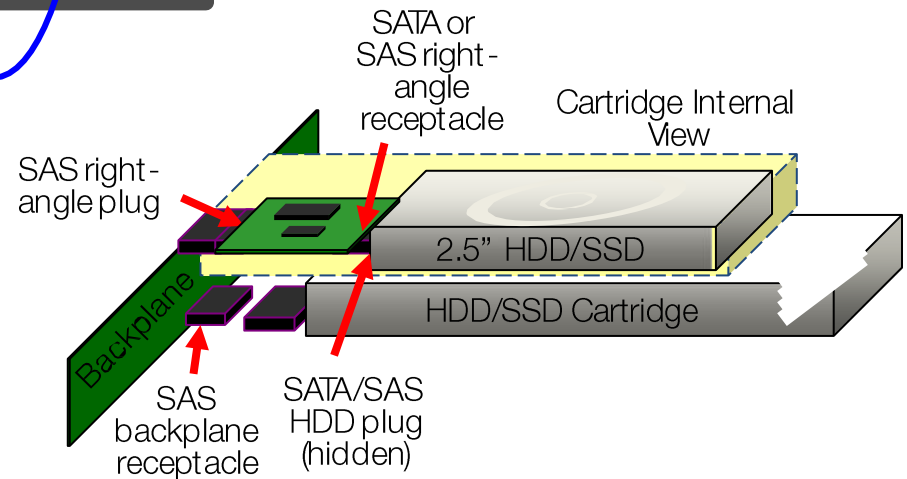- Used for 1.8" SATA drive connection

Compression
- Single or Rec+Hdr available
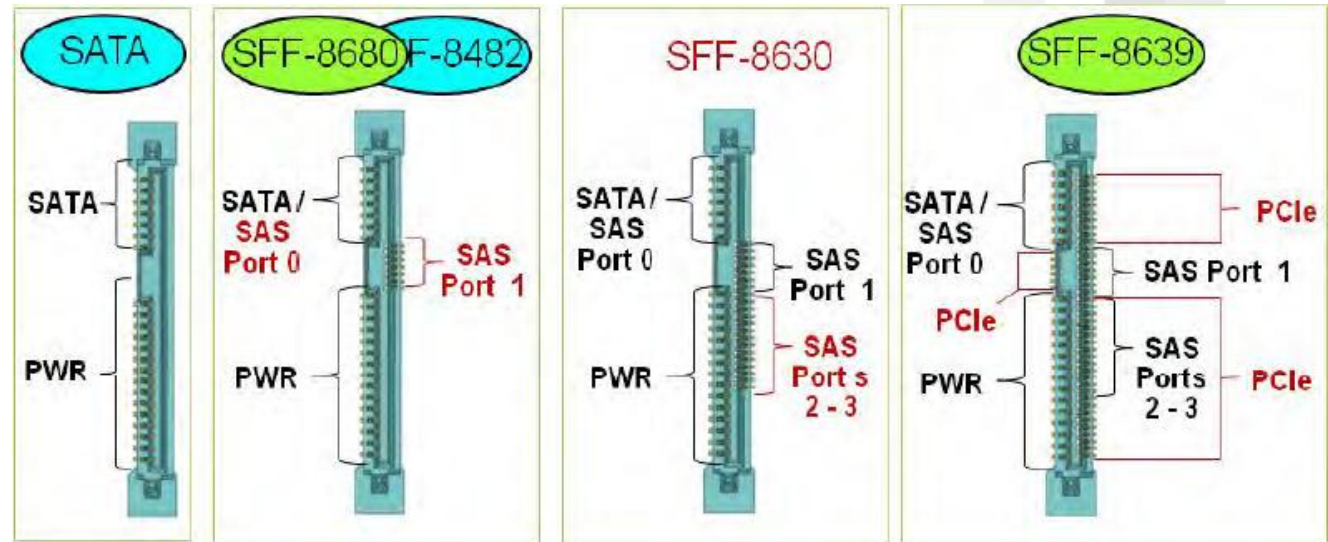- Used in HDD/board-to-board interface

Enterprise Storage Drive

Vertical SATA or SAS Receptacles

HDD
HDD
HDD
HDD
HDD
HDD
HDD
HDD

MEMORY
CPU
CPU
FAN RACK
POWER SUPPLY
POWER SUPPLY

Example of application shown for Server storage and HDD/SSD cartridges.

SATA or SAS right-angle receptacle

Cartridge Internal View

SAS right-angle plug

Backplane

2.5" HDD/SSD

HDD/SSD Cartridge

SAS backplane receptacle

SATA/SAS HDD plug (hidden)

Storage Interface Comparison

		SATA	SFF-8680/F-8482	SFF-8630	SFF-8639
SATA	1.5 - 6 Gb/s	☺	☺	☺	☺
SAS	3 – 12 Gb/s		☺	☺	☺
Multilink SAS	12 Gb/s			☺	☺
SATA Express (PCIe)					☺
SCSI Express (PCIe)	8 Gb/s				☺
NVM Express (PCIe)					☺

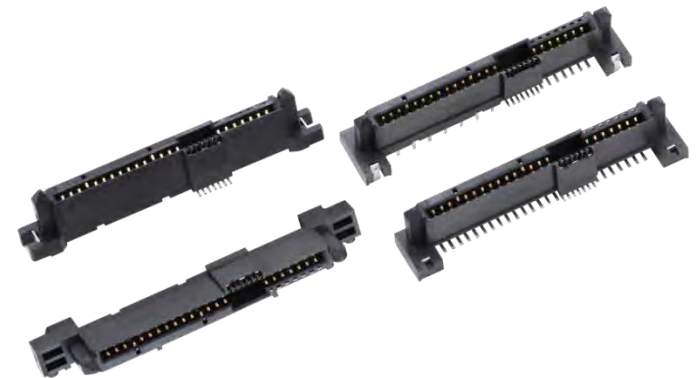| ≤ 6 Gb/s	12 Gb/s	8–12 Gb/s
Available	Available	Available

12G SAS Connectors

- The 29-position, SAS receptacle and plug connectors enable the implementation of the high-speed, Serial Attached SCSI (SAS) hard disk drive (HDD)/solid state drive (SSD) interface in enterprise storage applications, servers and storage systems

- The SAS connector system is designed to support hot plugging and blind mating of HDDs

- The high-speed, serial interface is designed to support differential signaling.

- FCI's SAS is able to perform up to a data speed of 12 Gb/s by incorporating ground bar design technology and conform to SFF8680 specifications
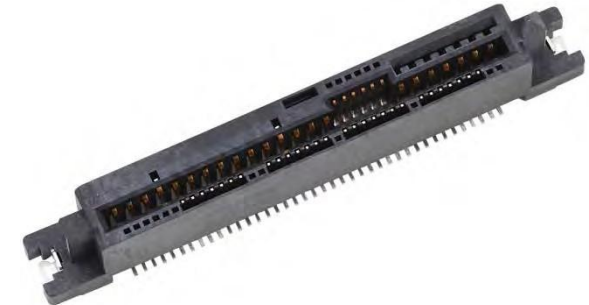
12G SAS Right Angle Plug

12G SAS Vertical & Right Angle Receptacles

12G SAS/PCIe Connectors

- The 68-position, SAS PCIe receptacle and plug connectors enable implementation of high-speed Serial Attached SCSI (SAS) hard disk drive (HDD) interface as well as Peripheral Component Express (PCIe) based devices such as solid state drive (SSD)

- FCI's 12G SAS/PCIe is able to perform up to a data speed of 12 Gb/s and conform to SFF8639 specifications

- The high-speed serial interface is designed to be back-ward compatible with 6Gbps SAS or SATA connectors.
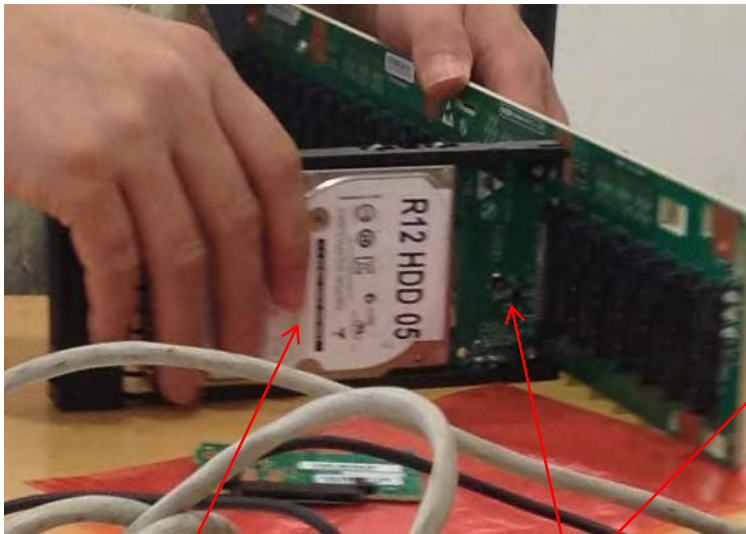

12G SAS/PCIe Vertical Receptacle

12G SAS/PCIe Vertical Plug

Example of Interposer Card

Top Side

Bottom Side

6G SAS HDD

Interposer Card

6G SAS
RA Receptacle

12G SAS
RA Plug

THANK YOU