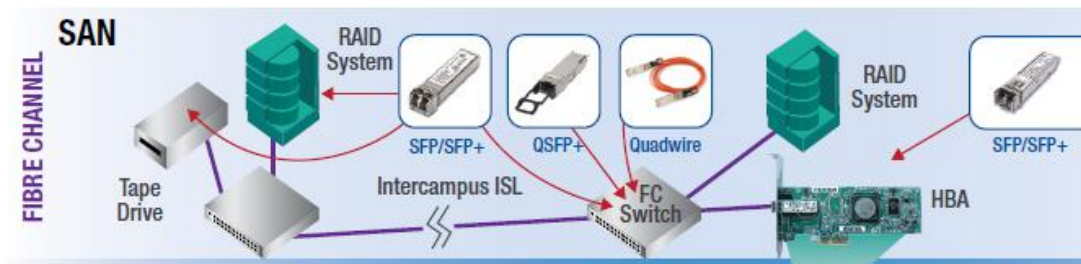


Solution for Storage Area Network (SAN) and Gigalight Optical Module

The Storage Area Network (referred to as SAN) of data center usually adopts Fiber Channel (FC) technology, connect storage arrays and server host via FC switches and establish the area network dedicated for data storage. After ten years of development, SAN has already been quite mature and become the defacto standard in the industry. As a high-speed network interconnection technology (the common running rates include 2Gbps, 4Gbps, 8Gbps, 14Gbps and 28Gbps), Fiber Channel (FC) is mainly used for connecting the storage device in data center, but it has become a common connection type in enterprise-class storage SAN. Meanwhile, being independent of data network, SAN network is actually a private network independent of TCP/IP network for storage, so the access speed is very quick. In addition, SAN generally adopts high-end RAID array, and make the performance of SAN taking the leading position in several professional storage schemes.



The following is the protocol standard development circuit diagram and corresponding working rate of Fiber Channel:

Standard	Product Naming	Throughput (MBps)	Line Rate (GBaud)	T11 Spec Technically Completed (Years)‡	Market Availability (Years)‡
	1GFC	200	1.0625	1996	1997
	2GFC	400	2.125	2000	2001
FC-PI-5	4GFC	800	4.25	2003	2005
FC-PI-5	8GFC	1600	8.5	2006	2008
FC-PI-5	16GFC	3200	14.025	2009	2011
	32GFC	6400	28.05	2013	2015
FC-PI-6P	128GFCp	25600	4x28.05	2014	2015

Fiber Channel Roadmap v1.8

The following is the list of main suppliers of equipment suppliers of Fiber Channel: (Gigalight products are compatible with the switching equipment of Brocade, Cisco,

Qlogic and other major equipment manufacturers)

Fiber Channel-Major players



<http://fibrenchannel.org/member-roster.html>

Gigalight can provide Fibre Channel scenarios complete product line, and its working rate covers 2Gbps, 4Gbps, 8Gbps, 14Gbps and 28Gbp:

Gigalight 28Gbit/Sec SWL Optical Transceiver P/N: GPP-85250G-SRC

Performance:

Fibre Channel: 28Gbit/sec line speed, full duplex;

Media: Hot-pluggable, industry-standard Small Form-Factor Pluggable (SFP+), LC connector;

Short Wavelength (SWL) 850nm

Gigalight28Gbit/Sec SWL Optical Transceiver P/N: GPP-85250G-LRC

Performance:

Fibre Channel: 28Gbit/sec line speed, full duplex;

Media: Hot-pluggable, industry-standard Small Form-Factor Pluggable (SFP+), LC connector;

Long Wavelength (LWL) 1310nm

Gigalight14Gbit/Sec SWL Optical Transceiver P/N: GPP-8514G-SRC

Performance:

Fibre Channel: 14Gbit/sec line speed, full duplex;

Media: Hot-pluggable, industry-standard Small Form-Factor Pluggable (SFP+), LC connector;

Short Wavelength (SWL) 850nm

Gigalight 8 Gbit/Sec SWL Optical Transceiver P/N: GPP-858G-SRC

Performance:

Fibre Channel: 2.125, 4.250, and 8.5 Gbit/sec line speed, full duplex; auto-sensing of 2, 4, and 8 Gbit/sec port speeds

Media: Hot-pluggable, industry-standard Small Form-Factor Pluggable (SFP+), LC

connector;

Short Wavelength (SWL) 850nm

Gigalight 8 Gbit/Sec LWL (10 KM) Optical Transceiver P/N: GPP-318G-LRC

Performance:

Fibre Channel: 2.125, 4.250, and 8.5 Gbit/sec line speed, full duplex; auto-sensing of 2, 4, and 8 Gbit/sec port speeds

Media: Hot-pluggable, industry-standard Small Form-Factor Pluggable (SFP), LC connector;

Long Wavelength (LWL) 1310nm

Gigalight 4 Gbit/Sec SWL Optical Transceiver P/N: GP-854G-S3CD

Performance:

Fibre Channel: 1.0625, 2.125, and 4.250 Gbit/sec line speed, full duplex; auto-sensing of 1, 2, and 4 Gbit/sec port speeds; compatible with Gigabit Ethernet

Media: Hot-pluggable, industry-standard Small Form-Factor Pluggable (SFP), LC connector;

Short Wavelength (SWL) 850nm

Gigalight 4 Gbit/Sec LWL (4 KM) Optical Transceiver P/N: GP-314G-02CD

Performance:

Fibre Channel: 1.0625, 2.125, and 4.250 Gbit/sec line speed, full duplex; auto-sensing of 1, 2, and 4 Gbit/sec port speeds

Media: Hot-pluggable, industry-standard Small Form-Factor Pluggable (SFP), LC connector;

Long Wavelength (LWL) 1310nm

Gigalight 4 Gbit/Sec LWL (10 KM) Optical Transceiver P/N: GP-314G-L1CD

Performance:

Fibre Channel: 1.0625, 2.125, and 4.250 Gbit/sec line speed, full duplex; auto-sensing of 1, 2, and 4 Gbit/sec port speeds

Media: Hot-pluggable, industry-standard Small Form-Factor Pluggable (SFP), LC connector; Long Wavelength (LWL) 1310nm

Gigalight 4 Gbit/Sec ELWL (30 KM) Optical Transceiver P/N: GP-314G-L4CD

Performance:

Fibre Channel: 1.0625, 2.125, and 4.250 Gbit/sec line speed, full duplex; auto-sensing of 1, 2, and 4 Gbit/sec port speeds

Media: Hot-pluggable, industry-standard Small Form-Factor Pluggable (SFP), LC connector;

Extended Long Wavelength (ELWL) 1310nm