

FLYOVER® QSFP CABLE ASSEMBLIES



FEATURES & BENEFITS

QSFP28, QSFP-DD and QSFP-D8 systems utilize Samtec Flyover® technology to route data above lossy PCB, simplifying board layout and extending signal reach. The modular design enables optimized systems that improve heat management, increase signal integrity performance, build in scalability for future upgrades and reduces costs by creating a multifunction board.

NRZ	PAM4
56 Gbps	112 Gbps

FLYOVER® QSFP SYSTEM

- 4 Channels (x4 bidirectional, 8 differential pairs)
- Up to 400 Gbps aggregate (112 Gbps PAM4)
- Compatible with all MSA QSFP pluggables
- Multiple heat sink options available for optimal dissipation
- Eye Speed® 30 or 34 AWG twinax cable
- Multiple end 2 options for design flexibility
- Evaluation Kits available (REF-205303-X.XX-XX and REF-200471-X.XX-XX), visit samtec.com/kits



Localized press-fit control and power contacts eliminate the need for a secondary cable and connector



High-speed contacts directly soldered to Eye Speed® ultra low skew twinax

FLYOVER® QSFP DOUBLE DENSITY

- 8 Channels (x8 bidirectional, 16 differential pairs)
- Up to 400 Gbps aggregate (56 Gbps PAM4)
- Belly-to-belly mating for maximum density
- Backward compatible with QSFP modules
- Multiple heat sink options available for optimal dissipation
- Variety of end 2 options
- Evaluation Kits available (REF-205605-X.XX-XX and REF-203423-X.XX-XX), visit samtec.com/kits

800G FLYOVER® DOUBLE DENSITY

- 8 Channels (x8 bidirectional, 16 differential pairs)
- Up to 800 Gbps aggregate (112 Gbps PAM4)
- Belly-to-belly mating for maximum density
- Backward compatible with QSFP & QSFP-DD modules
- Multiple heat sink options available for optimal dissipation
- Variety of end 2 options

FLYOVER® QSFP28 CABLE ASSEMBLY

FQSFP	LEAD STYLE	CABLE LENGTH	PLATING	CONTACT TYPE	END OPTION
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-01
= 10 Low-Speed,
8 Pairs High-Speed

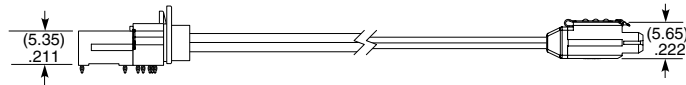
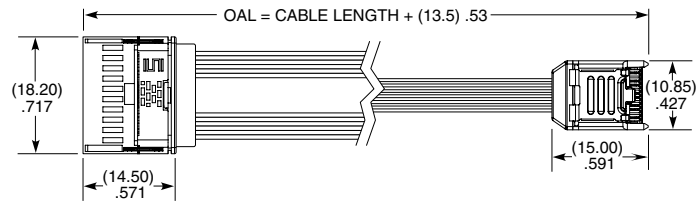
-"XX.X"
= Length in inches
04.0" (101.6 mm)
minimum

-L
= 10 μ" (0.25 μm)
Gold over
50 μ" (1.27 μm)
Ni on contact area,
Matte Tin on tail

-PF
= Press-fit

-3
= ECUE
-4
= ARC6-8

FQSFP



FQSFP-01-XX.X-L-PF-4 SHOWN

QSFP	CAGE OPTION	NO. OF PORTS	EMI PANEL OPTION	OPTION	FLYOVER
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-1
= Single Stack

-1
= One Port

-S
= Spring
Fingers

(Leave blank for no Light Pipe)

(Leave blank for no flyover)

-2
= Two Ports

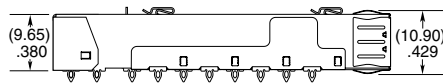
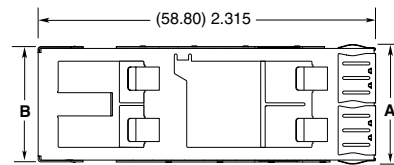
-LP
= Light Pipe
(1 & 4 ports only)

-F
= Flyover

-4
= Four Ports

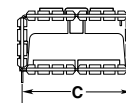
-N
= No heat sink closed top
(Not available with -LP)

QSFP



QSFP-1-1-S-F SHOWN

NO. OF PORTS	A	B	C
-1	(20.62) .812	(19.85) .781	(19.00) .748
-2	(39.62) 1.560	(38.85) 1.530	(38.00) 1.496
-4	(77.62) 3.056	(76.85) 3.026	(76.00) 2.992



HEAT SINKS		LIGHT PIPES	
PART NUMBER	HEAT SINK HEIGHT	PART NUMBER	NO. OF PORTS
HS-QSFP-P1-01	(4.20 mm) .165"	LP-FQSFP-01	1 pipe
HS-QSFP-P1-02	(6.50 mm) .256"	LP-FQSFP-02	2 pipes
HS-QSFP-P1-03	(13.50 mm) .531"	LP-FQSFP-04	4 pipes
HS-QSFP-P1-04	(1.50 mm) .059"		

View complete specifications at samtec.com/LP-FQSFP

For Light Pipe, add -LP to the end of part number.
View complete specifications at samtec.com/HS-QSFP

View complete specifications at: samtec.com/FQSFP & samtec.com/QSFP

Notes:
Some sizes, styles and options are non-standard, non-returnable.