



FLYOVER® SFP, QSFP & OSFP PANEL ASSEMBLIES

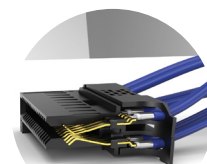
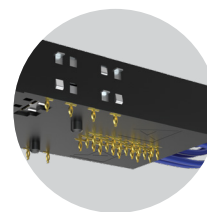


PAM 4	PAM 4	PAM 4
56	112	224
G b p s	G b p s	G b p s

FEATURES & BENEFITS

Flyover® panel cable systems utilize Samtec Flyover® cable technology to route data above lossy PCB through Eye Speed® ultra low skew twinax cable, 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 reduce costs by creating a multifunction board.

- High-speed contacts directly terminated to Eye Speed® ultra low skew twinax
- Low-speed and power positions transmitted through press-fit contact tails
- Multiple end 2 (co-packaged and near-chip) options for design flexibility
- Cages and heat sinks available for optimized thermal performance
- SI Evaluation Kits available, visit [samtec.com/kits](https://www.samtec.com/kits)



FLYOVER® SFP SYSTEM

- 112 Gbps PAM4 performance
- Belly-to-belly capable for maximum density
- Accepts all MSA compliant SFP pluggable modules
- Eye Speed Thinax™ ultra low skew twinax cable (3.5 ps/m max)

FLYOVER® OSFP SYSTEM

- Up to 1600 Gbps aggregate (224 Gbps PAM4)
- 8 Channels (x8 bidirectional, 16 differential pairs)
- Belly-to-belly capable for maximum density
- Eye Speed Thinax™ ultra low skew twinax (3.5 ps/m max) or Eye Speed® hyper low skew twinax (1.75 ps/m max)

FLYOVER® QSFP SYSTEM

- 4 Channels (x4 bidirectional, 8 differential pairs)
- Up to 400 Gbps aggregate (112 Gbps PAM4)
- Compatible with all MSA QSFP pluggables
- Eye Speed® ultra low skew twinax cable (3.5 ps/m max)

FLYOVER® QSFP DOUBLE DENSITY

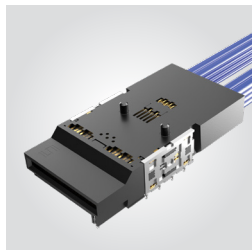
- 8 Channels (x8 bidirectional, 16 differential pairs)
- Up to 800 Gbps aggregate (112 Gbps PAM4)
- PCIe® 6.0/CXL® 3.2 capable
- Belly-to-belly capable for maximum density
- Backward compatible with QSFP and QSFP-DD modules
- Eye Speed® ultra low skew twinax or Eye Speed Thinax™ twinax cable (3.5 ps/m max)

The PCIe® design mark is a registered trademark and/or service mark of PCI-SIG.

FLYOVER® QSFP DOUBLE DENSITY CABLE ASSEMBLY

QSFP	D8	CABLE TYPE	FOOTPRINT	CABLE LENGTH	END 2 OPTION
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FQSFP-D8



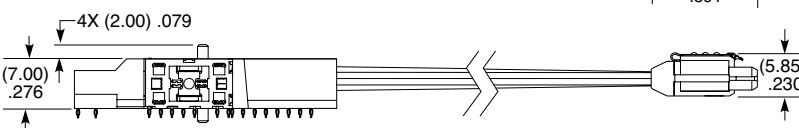
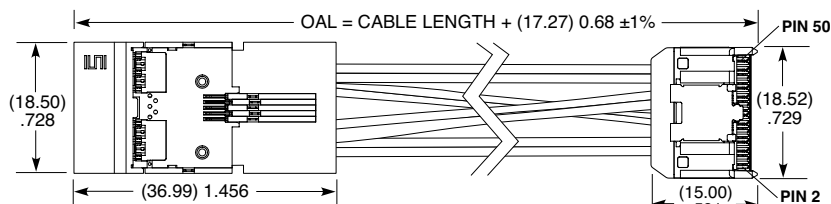
-03
= 34 AWG, 92 Ω
ultra low skew
twinax cable, 16 pairs

-05
= 34 AWG, 92 Ω
Thinax™ ultra low skew
twinax cable, 16 pairs

-A
= Primary
-B
= Secondary
(Belly-to-Belly only)

-"XX.X"
= Length in inches
06.0" (152.4 mm) min.
(-1 & -2 End 2 options)
07.0" (177.8 mm) min.
(-3 End 2 option)

-1
= ARC6-16
(AcceleRate®)
-2
= NVAC 2x2
(NovaRay®)
-3
= CPC
(Si-Fly® LP)



FQSFP-D8-03-A-XX.X-1 SHOWN

OTHER SOLUTIONS

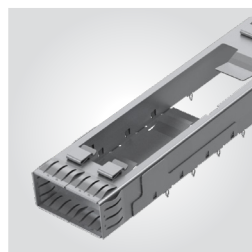
400G/56 Gbps PAM4 double density cable assembly; visit samtec.com?fqsfdd

PRESS-FIT TOOLING

CAT-PT-FQSFP-DD-01
For more information, visit www.samtec.com/tooling

QSFP	D8	STACK	NO. OF PORTS	OPTION	STYLE
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QSFP-D8



-1
= Single Stack

-1
= One Port

-S
= Spring Fingers

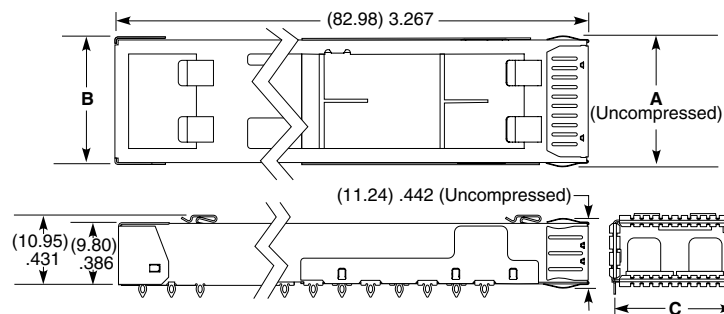
-F
= Flyover®

-2
= Two Ports
-3
= Three Ports

PRESS-FIT TOOLING

CAT-PT-QSFP-03-XX
For more information, visit www.samtec.com/tooling

NO. OF PORTS	A	B	C
-1	(20.96) .825	(19.87) .782	(19.00) .748
-2	(39.96) 1.573	(38.87) 1.530	(38.00) 1.496
-3	(58.96) 2.321	(57.87) 2.278	(57.00) 2.244

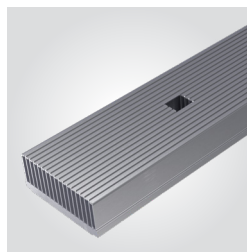


QSFP-D8-1-1-S-F SHOWN

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

HS-QSFP	D8	HEAT SINK HEIGHT
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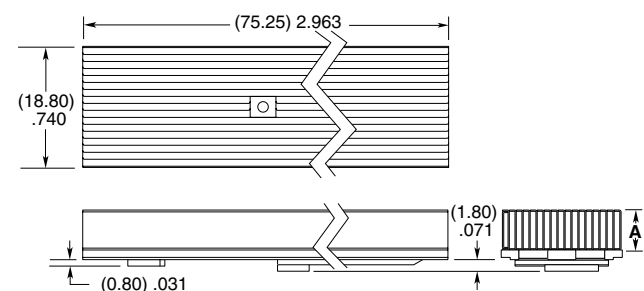
HS-QSFP-D8



-1
= (6.20 mm) .244" height

-2
= (12.00 mm) .472" height

HEAT SINK HEIGHT	A
-1	(6.20) .244
-2	(12.00) .472



HS-QSFP-D8-1 SHOWN