



FLYOVER[®] SFP, QSFP & OSFP PANEL ASSEMBLIES

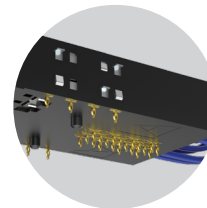


PAM4	PAM4	PAM4
56	112	224
Gbps	Gbps	Gbps

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[®] 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[®] 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 cable (3.5 ps/m max) or Eye Speed[®] hyper low skew twinax (1.75 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

FQSFP	DD	LEAD STYLE	FOOTPRINT	CABLE LENGTH	END 2 OPTION
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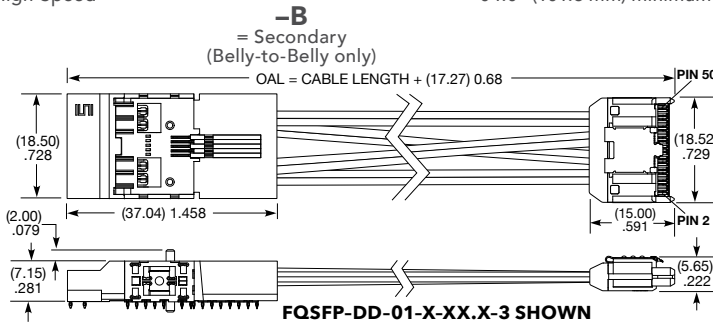
-01
= 20 Low-Speed,
16 Pairs High-Speed

-A
= Primary

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

-3
= ARC6-16

FQSFP-DD



Additional end options such as NovaRay® available; contact HDR@samtec.com

PRESS-FIT TOOLING

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

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

View complete specifications at: samtec.com?FQSFP-DD

QSFP	DD	STACK	NUMBER OF PORTS	EMI PANEL OPTION	FLYOVER
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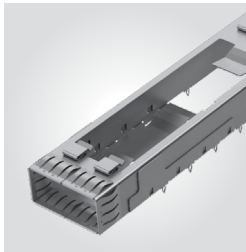
-1
= Single Stack

-1
= One Port

-S
= Spring Fingers

-F
= Flyover

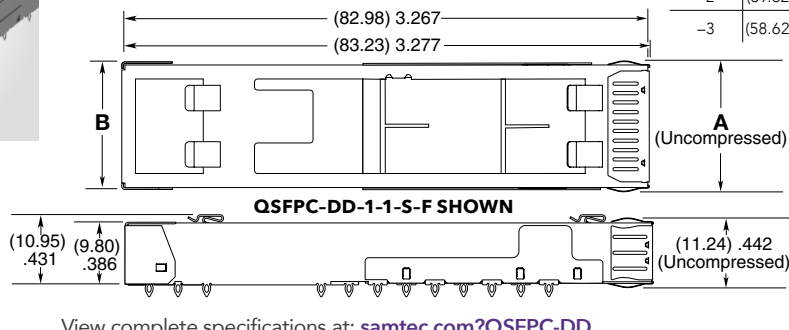
QSFP-DD



-2
= Two Ports

-3
= Three Ports

NO OF PORTS	A	B	C
-1	(20.62) .812	(19.87) .782	(19.00) .748
-2	(39.62) 1.560	(38.87) 1.530	(38.60) 1.496
-3	(58.62) 2.308	(57.87) 2.278	(57.00) 2.244



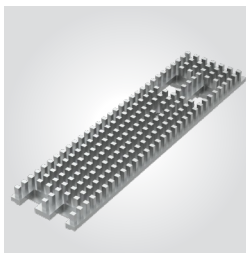
PRESS-FIT TOOLING

CAT-PT-FQSFP-DD-02-01 (1 Port)
CAT-PT-FQSFP-DD-02-02 (2 Port)
CAT-PT-FQSFP-DD-02-03 (3 Port)
For more information, visit www.samtec.com/tooling

View complete specifications at: samtec.com?QSFP-DD

HS-QSFP	DD	HEAT SINK STYLE	HEAT SINK HEIGHT
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HS-QSFP-DD

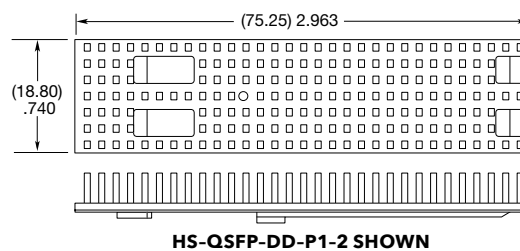


-P1
= Pin (Aluminum)

-1
= (4.20 mm) .165" height

-2
= (6.50 mm) .256" height

-3
= (13.50 mm) .531" height



HEAT SINK HEIGHT	A
-1	(4.20) .165
-2	(6.50) .256
-3	(13.50) .531

Note:
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