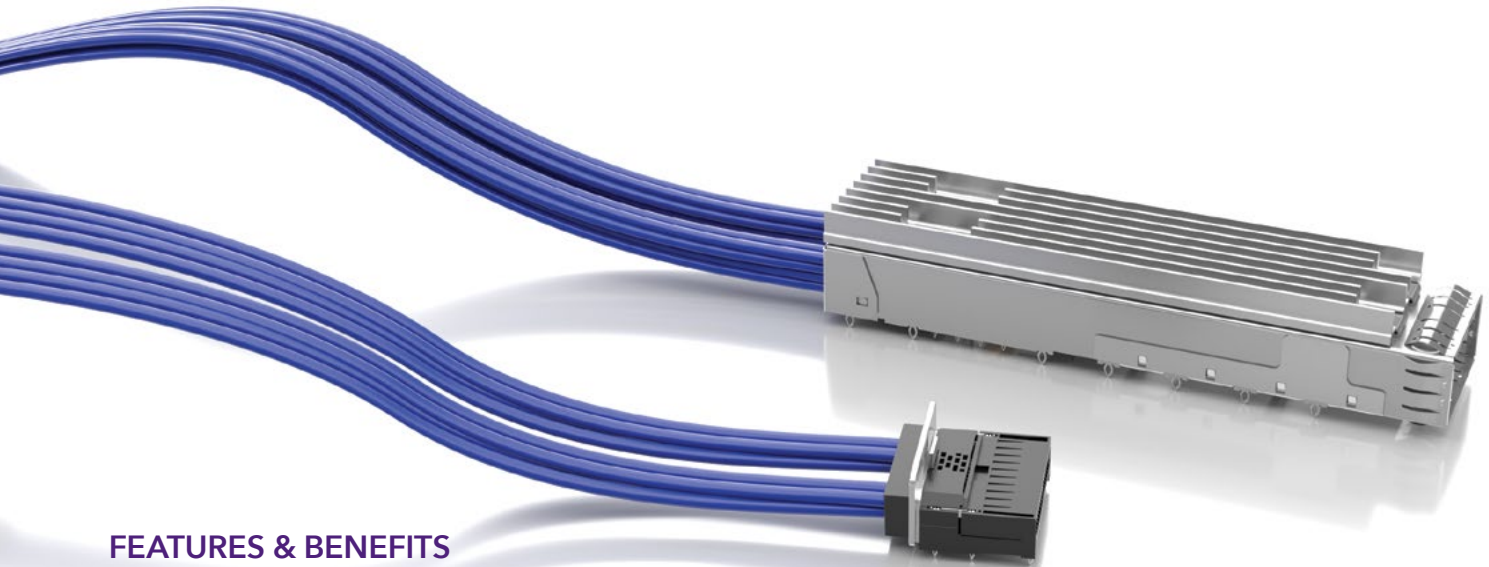


# FLYOVER® QSFP CABLE ASSEMBLIES



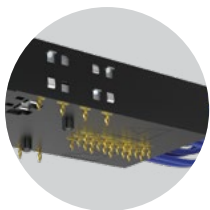
## FEATURES & BENEFITS

QSFP, 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 reduce costs by creating a multifunction board.

| NRZ        | PAM4        |
|------------|-------------|
| 56<br>Gbps | 112<br>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), visit [samtec.com/kits](http://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-203424-X.XX-XX), visit [samtec.com/kits](http://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® QSFP DOUBLE DENSITY CABLE ASSEMBLY

**FQSFP** - **DD** - **LEAD STYLE** - **FOOTPRINT** - **CABLE LENGTH** - **END 2 OPTION**

## FQSFP-DD



**-01**  
= 20 Low-Speed,  
16 Pairs High-Speed

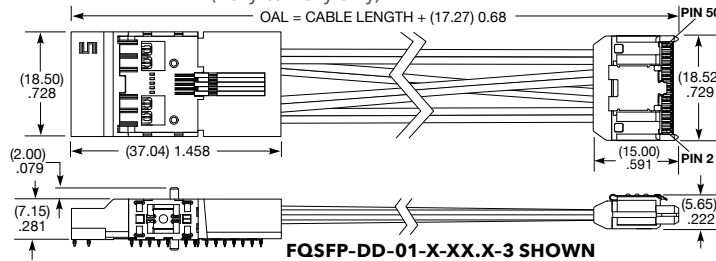
**-A**  
= Primary

**-B**  
= Secondary  
(Belly-to-Belly only)

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

**-3**  
= ARC6-16

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



### PRESS-FIT TOOLING

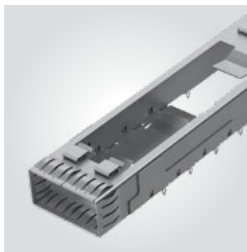
CAT-PF-FQSFP-DD-01  
For more information, visit  
www.samtec.com/tooling

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

View complete specifications at: [samtec.com?FQSFP-DD](http://samtec.com?FQSFP-DD)

**QSFP** - **DD** - **STACK** - **NUMBER OF PORTS** - **EMI PANEL OPTION** - **FLYOVER**

## QSFP-DD



**-1**  
= Single Stack

**-1**  
= One Port

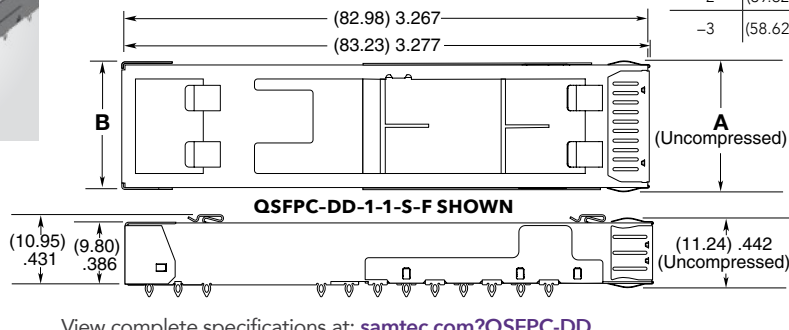
**-S**  
= Spring Fingers

**-F**  
= Flyover

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

View complete specifications at: [samtec.com?QSFP-DD](http://samtec.com?QSFP-DD)

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

## HS-QSFP-DD

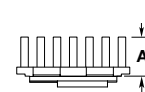
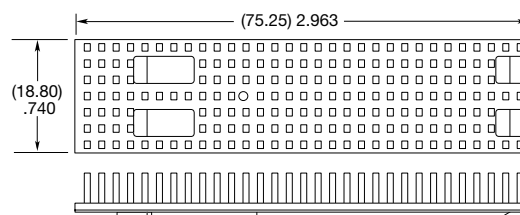


**-P1**  
= Pin (Aluminum)

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

View complete specifications at: [samtec.com?HS-QSFP-DD](http://samtec.com?HS-QSFP-DD)