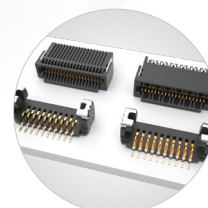


FIREFLY™ MICRO FLYOVER SYSTEM™

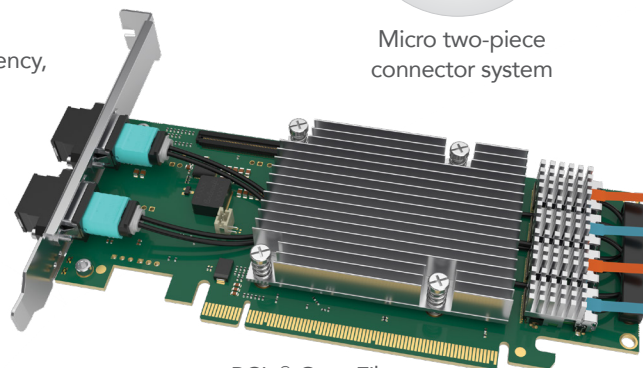
FEATURES & BENEFITS

- Data connection taken “off board” simplifies board layout
- Industry leading miniature footprint allows for higher density close to data source
- Performance up to 28 Gbps per lane with a path to 112 Gbps PAM4 via optical cable for greater reach
- Simple assembly process with easy insertion/removal and trace routing, no through-holes
- Interchangeability of copper and optical cable using the same two-piece surface mount connector
- PCIe®–Over–Fiber (PCUO/PTUO) supports PCIe® protocol for low latency, power savings and guaranteed transmission; 3.0 and 4.0 solutions
- -40 °C to +85 °C extended temperature system (ETUO) for industrial applications
- Extreme Environment FireFly™ sealed and parylene-coated for rugged military and aerospace applications (ETMO)
- Multiple end options available: MTP®, MXC®, MT, VITA™ 66.1/66.4 and other common interfaces
- Variety of integral heat sinks for conduction and convection cooling

MTP® and MXC® are registered trademarks of US Conec Ltd.
PCI-SIG®, PCI Express® and PCIe® design marks are registered trademarks and/or service marks of PCI-SIG.
VITA/VNX/VNX+/FMC/FMC+/XMC/XMC+ are all respective trademarks of VITA



Micro two-piece
connector system

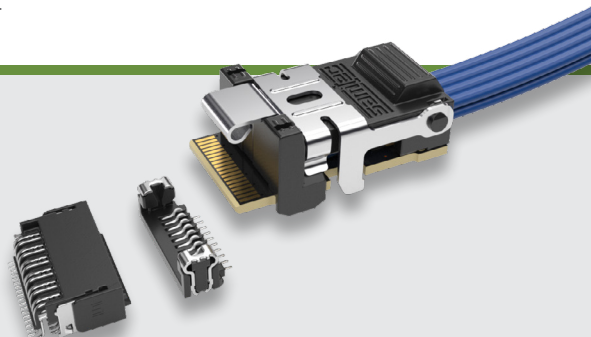


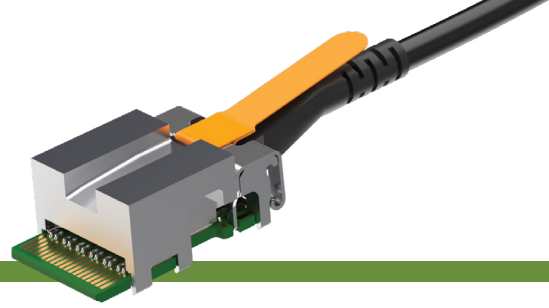
PCIe®-Over-Fiber
Adaptor Card

FIREFLY™ COPPER

- Performance to 56 Gbps
- 8 or 12 differential pairs
- 100 Ω, 34 or 36 AWG Eye Speed® twinax cable
- Variety of end 2 termination options
- Low profile housing for space savings
- Low-cost solution for seamless integration of new and existing designs

For complete copper FireFly™ or PCIe® over FireFly™ series specifications www.samtec.com?ECUE and www.samtec.com?PCUE

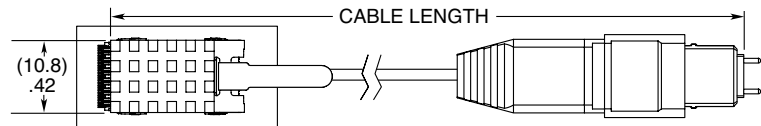




ECUO	WIDTH	DATA RATE	CABLE LENGTH	0	HEAT SINK	1	FIBER TYPE	END 2 OPTIONS
	-B04 = 4 Tx + 4 Rx -T12 = 12 Tx -R12 = 12 Rx -Y12 = 12 Tx + 12 Rx -U12 = 12 Channel AOC (Unidirectional)	-14 = 14 Gbps per lane -16 = 16.1 Gbps per lane (N/A -B04) -25 = 25.7 Gbps per lane (-B04 only) -28 = 28.1 Gbps per lane	-"XXX" = Overall Length in Centimeters		-1 = Flat -2 = Pin-fin (-14 & -16 only) -3 = Flat with groove -4 = PCIe® Pin-fin (-14 & -16 only) -5 = 1.75 cm tall Pin-fin		-5 = Jacketed ribbon with boot -6 = Jacketed ribbon -7 = Black loose tube with boot -8 = Black loose tube	(Leave blank for -U12 or -B04 width) -Y12 requires -2X end option 12 Fibers -01 = MTP® Male -02 = MTP® Female -07 = MXC® Internal Plug* -0E = MPO Plus®, Male, bayonet 24 Fibers -21 = MTP® Male -22 = MTP® Female -27 = MXC® Internal Plug* -2E = MPO Plus®, Male, bayonet

ECUO

Mates with:
UEC5, UCC8,
OPA



FEATURES

- Supports data center and HPC protocols, including: Ethernet, InfiniBand™, Fibre Channel
- Customizable optical connectors
- Integrated coupling capacitors
- Standard temperature range 0 °C to +70 °C
- Evaluation & Development boards available

TOOLING

Insertion Tool: CAT-IN-ECUO-02

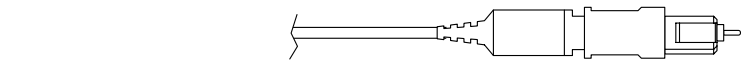
Notes:

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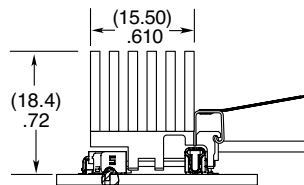
PCI-SIG®, PCI Express® and PCIe® design marks are registered trademarks and/or service marks of PCI-SIG.

All FireFly™ designs, specifications and components are preliminary and subject to change without notice.

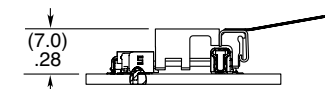
Some lengths, styles and options are non-standard, non-returnable.



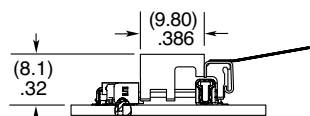
-01 (MTP® MALE SHOWN)



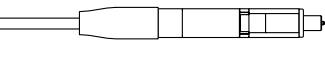
-2 PIN-FIN HEAT SINK



-1 FLAT HEAT SINK



-3 FLAT WITH GROOVE HEAT SINK (MULTI-ROW CONFIGURATION)



-07 (MXC® INTERNAL PLUG SHOWN)

CLASS 1 LASER PRODUCT
per IEC 60825-1 Ed. 3 (2014)

Applies to all end 2 options except MXC®

***CLASS 3R LASER PRODUCT**
Laser Radiation. Avoid Direct Eye Exposure.



Applies to MXC® end option only.

View complete specifications at: samtec.com?ECUO