**PRODUCT ROADMAP**

**Advanced Optics**
Samtec is focused on bringing to market 112 Gbps PAM4 solutions that are scalable, manufacturable and cost-efficient.

**Immersion Cooling**
Capable of immersion for liquid cooled systems.

**Direct Connect™**
On-package interconnect enables 56 Gbps PAM4 performance, eliminates distortion through the BGA region and improves density.

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**FIREFLY™ OPTICAL TECHNOLOGY**

Data connection is taken “off board,” simplifying board layout and enhancing signal integrity from IC to faceplate

Industry leading miniature footprint allows for higher density close to the data source

Rugged, simple to use system with easy insertion/removal and trace routing

Supports data center, HPC and FPGA protocols, including 10/40/100 GbE Ethernet, InfiniBand™, Fibre Channel, Aurora and PCIe®

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**OM3 multi-mode fiber**
High-performance micro optical engine technology

**Low insertion force surface mount connector system (UEC5 and UCC8)**

**Integral heat sink for optimized thermal conditions**

**ECUO**
**FIREFLY™ OPTICAL SYSTEMS**

Designed for flexibility, optical (ECUO) for greater distances and copper (ECUE) for cost optimization

- x4 and x12 configurations

Multiple end 2 options including MTP®, MXC®, MT and ARINC 801

PCI Express®-Over-FireFly™ (PCUO) 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)

**PASSIVE & ACTIVE OPTICAL SOLUTIONS**

FireFly™ is compatible with optical backplane systems in multiple configurations

High-density solutions for front panel or backplane applications with MXC® connectors

Industry standard passive MPO-to-MPO panel adaptor (OPA) and optical patch cable (FOPC)

MTP® and MXC® are registered trademarks of US Conec Ltd.

**FIREFLY™ EVALUATION & DEVELOPMENT KITS**

For more information visit [samtec.com/kits](http://samtec.com/kits) or contact kitsandboards@samtec.com.

28 Gbps FireFly™ Evaluation Kit (REF-209623-01)

14 Gbps FireFly™ FMC Development Kit (REF-193429-01)

25/28 Gbps FireFly™ FMC+ Development Kit (REF-200772-XXX-XX-01)

25 Gbps FireFly™ FMC+ Development Kit in development

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