

# 28 GBPS FIREFLY™ EVALUATION KITS

Test Platform for real-time evaluation for copper or optical FireFly™ Micro Flyover System™ at 28 Gbps

As data rates increase, trace lengths on PCBs decrease. Samtec's Flyover® Technology simplifies PCB design and limits signal degradation in high data rate applications. Samtec's FireFly™ Micro Flyover System™ offers the flexibility of using optical and copper interconnects interchangeably with the same connector system.

The 28 Gbps FireFly™ Evaluation Kits provide system designers, optical and SI engineers an easy-to-use solution for testing the FireFly™ Micro Flyover System™. Rated up to 28 Gbps per lane, these kits allow the designer real-time evaluation of an actively running copper or optical FireFly™ system in their lab.

## REF-209623-01 SUPPORTS:

- x 4 configuration in all speeds
- x 12 configurations ≤ 16 Gbps

## REF-230408-X.XX-XX SUPPORTS:

- x 12 configurations at 25 and 28 Gbps

The 28 Gbps FireFly™ Evaluation Kits deliver a high-quality system with robust optical, electrical and mechanical design. Please contact Samtec's technical experts at [FireFlyTPS@samtec.com](mailto:FireFlyTPS@samtec.com) for additional information.

## FEATURES:

- Updated GUI and application software hosted via Raspberry Pi 3 and MicroSD card
- Accessible via stand-alone executable or connection via laptop/web browser
- Two PCB system with compact form factor
- One FireFly™ two-piece SMT connector systems (UCC8/UEC5-2 series)
- Supports one FireFly™ AOC or Copper Cable Assembly available separately
- Routes high-speed differential pairs (12 total) from UEC5-2 series connector to high-precision RF connectors
- Features optimized SI performance via Samtec Final Inch® BOR PCB trace routing
- Optional industry-standard MTP® connector
- Enable time domain measurements via direct connection to TDR/TDTs
- Enable frequency domain measurements via direct connection to VNAs

## APPLICATIONS:

- Evaluation of FireFly™ Micro Flyover System™
- FPGA Emulation Systems
- FPGA Evaluation Kits
- FPGA Development Kits
- Phased Radar Arrays
- Medical Imaging
- Test and Measurement

## KIT INCLUDES:

- 28 Gbps FireFly™ Evaluation Kit PCB
- 5V power adapter
- Power supply connector
- Raspberry Pi
- MicroSD card
- Quick Start Card



Samtec Part No.  
REF-209623-01 Pictured

# 28 GBPS FIREFLY™ EVALUATION KIT SPECIFICATIONS

For additional information or support on your next generation FireFly™ design, please visit [samtec.com/28g-firefly](http://samtec.com/28g-firefly) or contact [FireFlyTPS@Samtec.com](mailto:FireFlyTPS@Samtec.com).

- Optional IDC support via Aardvark I2C/SPI Host Adapter connector available
- Dual 5V DC input options (Power Jack or Banana Sockets)
- Max power 20W (5V/4A)
- LED Indicators
- Optional 5V Fan Power supply
- Power Switch
- Reset Switch
- Select Switch

## 28 Gbps FIREFLY™ EVALUATION KIT SPECIFICATIONS BLOCK DIAGRAM

