PHASED ARRAY SYSTEMS

Samtec delivers Sudden Service® solutions for standard and application-specific military and aerospace designs to meet the stringent quality, production and compliance requirements of our customers. The combined efforts of Samtec’s on-going Severe Environment Testing initiative with our extremely flexible high-speed interconnects provides a quick turn and cost-effective solution for military and aerospace applications that require reliable performance and durability. For more information, please visit samtec.com/milaero or contact Military@samtec.com.

APPLICATIONS INCLUDE:

- Cockpit communications
- Missile defense
- SatCom
- Jamming Equipment
- 5G MIMO antennas
- Early warning radar systems
- Land based phased array radar
- In-flight phased array radar
- Naval ship phased array radar

RUGGEDIZING SOLUTIONS:
COTS, ASP or MAP interconnect solutions with a wide variety of rugged features to ensure quality and durability in any application.

- Jack Screws
- Positive Latching
- Friction Locks
- Retention Pins
- Board Locks
- Weld Tabs
- Guide Posts
- Shielding
- Screw Downs
- Board Standoffs

SEVERE ENVIRONMENT TESTING
Severe Environment Testing (SET) is a Samtec initiative to test products beyond typical industry standards and specifications, many set forth by common requirements for rugged / harsh environment industries. These products undergo additional testing to ensure they are more than suitable for military, space, automotive, industrial and other extreme applications.

Visit samtec.com/SET or contact set@samtec.com for additional information and current available test results.
**MIL/AERO PHASED ARRAY SOLUTIONS**

**Rugged Optics - FireFly™**
Series: ETUO, ECUO, UECS, UCC8
FireFly™ Micro Flyover System™ is a future proof, inside-the-box interconnect solution, with performance to 28 Gbps per lane and a path to 112 Gbps PAM4. The Samtec Optical Group designs, manufactures and supports bleeding edge optical solutions.

**High-Speed Cable**
Series: ARF6/ARC6, FQSFP, QSFP
High-speed cable assemblies with micro coax and ultra low skew twinax cable, for differential and single-ended applications. Assemblies include Flyover®, high-density array, integral ground plane, hermaphroditic, rugged Edge Rate® and high-speed PCI Express® systems.

**High-Speed Board-to-Board**
Series: HSEC6, ERF6/ERM6, SEAF/SEAM, ADF6/ADM6, LP AF/LPAM, NVA F/NVAM
Mezzanine systems with integral ground planes, high-density arrays, rugged signal integrity optimized Edge Rate® systems and high-speed performance up to 56 Gbps NRZ/112 Gbps PAM4.

**Micro Rugged**
Series: SFM/TFM, SFC/TFC, SEM/TEM, LSHM/HLC, CLP/FTSH, SMM/TMM
Micro pitch interconnects with high-reliability Tiger Eye™ and rugged Edge Rate® contact systems for high mating cycles, high-shock and vibration applications.

**Standards**
Series: YFX, SEAX, QFX, ESQ
RF interconnects for frequencies up to 110 GHz; 50 Ohm and 75 Ohm impedance; push-on, threaded or bayonet coupling; cable assembly, cable connector and board level applications.

**Rugged Optics - FireFly™**
For more information please visit [www.samtec.com/milaero](http://www.samtec.com/milaero) or contact [Military@samtec.com](mailto:Military@samtec.com)

**COMMERCIAL OFF-THE-SHELF (COTS)**
- Certified ISO-9001
- Cost-Effective
- Short Lead-Times
- No Minimum Order Quantity
- Full Qualification Testing Online

**APPLICATION SPECIFIC PRODUCT (ASP)**
- Modified COTS Built to Samtec’s Print
- AS9102 FAI Available
- Non-Standard Options Available
- Similar Part Qualification Testing Online

**MILITARY/AEROSPACE PRODUCT (MAP)**
- Modified COTS Built to Samtec’s Print
- Manufacturing Location Control Available
- Product Specification Control Available
- Non-Standard Options Available
- AS9102 FAI Available
- ITAR Control Available

**ADDITIONAL CAPABILITIES**
- Up to 30 µ” Gold
- Tin Lead
- -55 ºC to +125 ºC operating temperature on most connectors; -40 ºC to +125 ºC on THV/FEP cables

**ADDITIONAL CAPABILITIES**
- Customer specified plating (up to 50 µ” Gold, Tin Lead)
- Non-standard product options

**ADDITIONAL CAPABILITIES**
- Customer specified plating (up to 50 µ” Gold, Tin Lead)
- Non-standard product options
- ITAR control available