**Samtec Development and Evaluation Kits For Military Applications**

**August 2025**:  Samtec, Inc., the service leader in the connector industry, offers development and evaluation kits to ensure and validate that its interconnect products meet customers’ performance requirements. This includes mil/aero applications and using COTS and open standards products.

**Development and Evaluation Kits**

Samtec-designed evaluation and development kits featuring high-speed interconnect solutions help simplify design, from concept and prototype to development and production.

VITA defines and develops key computer bus, board, and system specifications, including VMEbus, PCI Mezzanine Card (PMC), VXS, VPX, VNX+, FMC, FMC+, QMC™, and many more.  Systems from space launch control to defense systems, medical imaging, and semiconductor processing have depended on products based on VITA™ Technologies.

The FPGA Mezzanine Card (FMC) was developed and ratified by a consortium of FPGA vendors and end-user members of the VITA™ 57 working group. FMC™ and FMC+™ are ANSI Standards that define a compact electro-mechanical expansion interface for a daughter card to an FPGA baseboard or other device with re-configurable I/O capability.

Samtec VITA 57.1 FMC evaluation kits include the [FMC Extender Card](https://nam10.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.samtec.com%2Fkits%2Foptics-fpga%2Ffmc-extender%2F&data=05%7C02%7CDanny.Boesing%40samtec.com%7Cc512088dc91149cb099008ddc9282738%7C9943a8162cec4883855e09a8c36108af%7C0%7C0%7C638887896496176007%7CUnknown%7CTWFpbGZsb3d8eyJFbXB0eU1hcGkiOnRydWUsIlYiOiIwLjAuMDAwMCIsIlAiOiJXaW4zMiIsIkFOIjoiTWFpbCIsIldUIjoyfQ%3D%3D%7C0%7C%7C%7C&sdata=0CAIaJXPGGnFpJeLfY7eGCp5R036GtfY6qyfAQ%2BIb%2FY%3D&reserved=0) and the [14 Gbps FireFly™ FMC Development Kit](https://nam10.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.samtec.com%2Fkits%2Foptics-fpga%2F14g-firefly-fmc%2F&data=05%7C02%7CDanny.Boesing%40samtec.com%7Cc512088dc91149cb099008ddc9282738%7C9943a8162cec4883855e09a8c36108af%7C0%7C0%7C638887896496203892%7CUnknown%7CTWFpbGZsb3d8eyJFbXB0eU1hcGkiOnRydWUsIlYiOiIwLjAuMDAwMCIsIlAiOiJXaW4zMiIsIkFOIjoiTWFpbCIsIldUIjoyfQ%3D%3D%7C0%7C%7C%7C&sdata=6DcaDUsIuREfMdZvA5Ju0jQVXb%2BfFcy6PaHyIYF9uu4%3D&reserved=0). Samtec VITA 57.4 FMC+ evaluation kits include the [FMC Extender Card](https://nam10.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.samtec.com%2Fkits%2Foptics-fpga%2Ffmc-extender%2F&data=05%7C02%7CDanny.Boesing%40samtec.com%7Cc512088dc91149cb099008ddc9282738%7C9943a8162cec4883855e09a8c36108af%7C0%7C0%7C638887896496224829%7CUnknown%7CTWFpbGZsb3d8eyJFbXB0eU1hcGkiOnRydWUsIlYiOiIwLjAuMDAwMCIsIlAiOiJXaW4zMiIsIkFOIjoiTWFpbCIsIldUIjoyfQ%3D%3D%7C0%7C%7C%7C&sdata=Bzj8jUvqayueNDZQITyp02G3muUk0Cwa4IJ7UWGy32c%3D&reserved=0), the [FMC+ HSPC Loopback Card](https://nam10.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.samtec.com%2Fkits%2Foptics-fpga%2Fhspc-fmcp%2F&data=05%7C02%7CDanny.Boesing%40samtec.com%7Cc512088dc91149cb099008ddc9282738%7C9943a8162cec4883855e09a8c36108af%7C0%7C0%7C638887896496247623%7CUnknown%7CTWFpbGZsb3d8eyJFbXB0eU1hcGkiOnRydWUsIlYiOiIwLjAuMDAwMCIsIlAiOiJXaW4zMiIsIkFOIjoiTWFpbCIsIldUIjoyfQ%3D%3D%7C0%7C%7C%7C&sdata=vrTnSMcYd726PvgyEBZHF8bs2kdY2G0hzi8nWG3ChXI%3D&reserved=0), the [FMC+ HSPC/HSPCe Loopback Card](https://nam10.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.samtec.com%2Fkits%2Foptics-fpga%2Fhspce-fmcp%2F&data=05%7C02%7CDanny.Boesing%40samtec.com%7Cc512088dc91149cb099008ddc9282738%7C9943a8162cec4883855e09a8c36108af%7C0%7C0%7C638887896496272961%7CUnknown%7CTWFpbGZsb3d8eyJFbXB0eU1hcGkiOnRydWUsIlYiOiIwLjAuMDAwMCIsIlAiOiJXaW4zMiIsIkFOIjoiTWFpbCIsIldUIjoyfQ%3D%3D%7C0%7C%7C%7C&sdata=mhZ0tUJJnuIq4IxvOHllow3JpTc9kIT7wclyoepiYi4%3D&reserved=0),  and the [25/28 Gbps FireFly FMC+ Development Kit](https://nam10.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.samtec.com%2Fkits%2Foptics-fpga%2F25g-28g-firefly-fmcp%2F&data=05%7C02%7CDanny.Boesing%40samtec.com%7Cc512088dc91149cb099008ddc9282738%7C9943a8162cec4883855e09a8c36108af%7C0%7C0%7C638887896496296209%7CUnknown%7CTWFpbGZsb3d8eyJFbXB0eU1hcGkiOnRydWUsIlYiOiIwLjAuMDAwMCIsIlAiOiJXaW4zMiIsIkFOIjoiTWFpbCIsIldUIjoyfQ%3D%3D%7C0%7C%7C%7C&sdata=LP7ANi2JUBJQoW2wgjvhi%2FbxGwSZKoi2kARxrLBDGH4%3D&reserved=0).

**Rugged, Reliable Connector Solutions**

Samtec board-to-board connector solutions are both standard and application-specific, meeting designers’ stringent quality, production, and compliance requirements for military and aerospace designs. Many of Samtec’s extensive line of rugged and high-speed interconnect products are ideal for Mil Spec environments and systems, including MIL-STD-810, MIL-STD-810G, MIL-STD-1344, MIL-PRF-38534, MIL-DTL-55302, and NASA Class D missions.

Samtec's products are tested to or beyond industry standards.  This includes lot screen testing per EIA-364, which meets or exceeds MIL-DTL-55302.

Samtec Severe Environment Testing (SET) includes Samtec’s standard DQT (Design Qualification Testing) and E.L.P.™ (Extended Life Product™) testing, as well as additional testing for interconnect systems that will be used in more extreme/harsh applications or environments.

**About Samtec, Inc.**

Founded in 1976, Samtec is a privately held, $1 billion global manufacturer of a broad line of electronic interconnect solutions.  With 40+ international locations and products sold in more than 125 countries, Samtec’s global presence enables its unmatched customer service. For more information, please visit: [http://www.samtec.com](https://nam10.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.samtec.com%2F&data=05%7C02%7CDanny.Boesing%40samtec.com%7Cc512088dc91149cb099008ddc9282738%7C9943a8162cec4883855e09a8c36108af%7C0%7C0%7C638887896496365792%7CUnknown%7CTWFpbGZsb3d8eyJFbXB0eU1hcGkiOnRydWUsIlYiOiIwLjAuMDAwMCIsIlAiOiJXaW4zMiIsIkFOIjoiTWFpbCIsIldUIjoyfQ%3D%3D%7C0%7C%7C%7C&sdata=mLKbczbug%2B%2B0j0j3mi%2BMbKU4Bm7ac68LtjThKFWIAPI%3D&reserved=0)