

FX-Beam™ Integrated FPC Jumper

OVERVIEW

The Neoconix FX-Beam™ products are semi-custom FPCs that provide a flexible, separable, electro-mechanical link between two printed circuit boards (PCBs). The product consists of an advanced flexible printed circuit (FPC) including an ultra-low-profile X-Beam™ connector and stiffener integrated on each end and is secured to the PC Board with a simple, highly reliable screw-down fastening system.

The X-Beam is a compressive interconnect, eliminating the need for any mating SMT connectors on the PC Board. X-Beam connectors occupy minimal board space and offer a rare combination of outstanding reliability, signal integrity, and power delivery. While the connectors and FPC pad patterns are standardized, the FPC layout is custom-designed for each application, based on the particular signal, power, and length requirements of that application.

By combining the advanced FPC design with an extremely short electrical termination path, these assemblies can uniquely combine high-speed signaling and significant power delivery. The FX-Beam Jumpers can be designed for signal, power or signal+power applications.

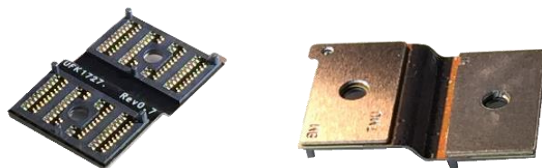
The FX-Beam Jumper product series is part of the Neoconix FPConnected™ family of FPC assemblies.

FEATURES

- Integrates X-Beam Connector + High-Performance FPC into One Solution
- 48, 68, 74 & 126 Position option available
- No SMT parts on Top of Mainboard
- Solderless Highly Reliable, Screw-down Connection to Mainboard
- High Current: >10A possible
- High-Speed: >10Gbps, including PCIe Gen4/5 and TB4
- Low Profile Mainboard Connection: <1.4mm (not including screw)
- Compliant with RoHS 2011/65/EU and IPC-4101B (halogen-free)
- Flexibility in FPC Length (typically 20mm – 150mm)



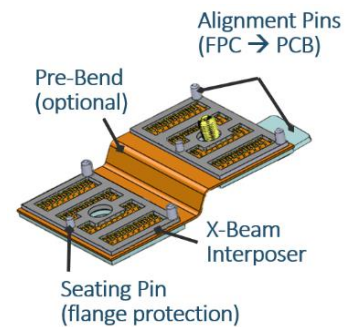
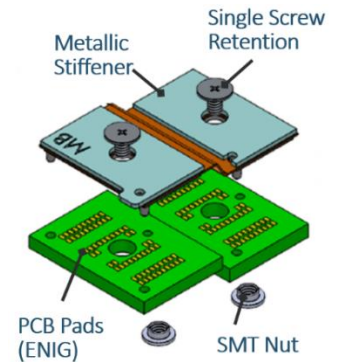
100mm Length FX-Beam™ Example



25mm Length FX-Beam™ Example



68 POS
FX-Beam™ Termination



Connector PCB Footprint		
Position Count	Length (mm)	Width (mm)
48	11.2	8.1
68	14.1	8.1
74	14.1	10.1
126	24.0	10.1

FOR MORE INFORMATION

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