# X-Beam™ FPC Jumper (XFPC)
## High Speed – High Power FPC link between PC Boards

### OVERVIEW

The Neoconix XFPC products are semi-custom FPC jumpers that provide a flexible, separable, electro-mechanical link between two printed circuit boards (PCBs).  The product consists of an advanced flexible printed circuit (FPC), each end of which will be secured to an ultra-low profile X-Beam connector that has been surface mounted onto each mating PCB.

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.
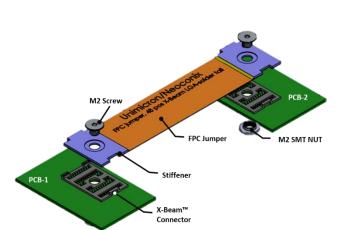
The FPC features gold-plated pads and integrated stiffeners on both ends and is secured to the X-Beam™ connector with a simple, highly reliable screw-down fastening system. By combining the advanced FPC design with an extremely short electrical termination path, these assemblies can uniquely combine high-speed signaling (>10Gbs) and significant power delivery (>5A). The XFPC Jumpers can be designed for signal, power or signal+power applications.

The XFPC Jumper product series is part of the Neoconix FPConnected™ family of FPC connector assemblies.

### FEATURES

- Low Profile X-Beam Mainboard Connection:  1.17mm
- High Speed:  to 10Gbps, Road Map 28Gbps
- High Current to > 5A
- Standard X-Beam pin counts of 12, 28, 48, and 68 positions
- Flexibility in FPC length (typically 20mm – 150mm)
- Custom FPC layout for high degree of optimization
- Highly reliable, screw-down connection to Mainboard
- Small footprint to Mainboard

### ORDERING INFORMATION

One XFPC jumper assembly consists of 1 FPC, 2 X-Beam connectors, 2 SMT nuts, and 2 screws, ordered separately
Connector & hardware common part numbers are shown below.

| Connector | Hardware | | | |
|---|---|---|---|---|
| X-Beam Connector (x2) | Screw Part Number(x2) | Description | M2 SMT Nuts (x2) | PCB Thickness (mm) |
| XBM-D012A (12-pos) | B01-000662 | M2 x 0.25 mm pitch, 3mm L | B01-000633 | ≤1.0 |
| XBM-G028A (28-pos) | B01-000661 | M2 x 0.40 mm pitch, 3mm L | B01-000654 | 1.0 – 1.6 |
| XBM-D048C (48-pos) | B01-000660 | M2 x 0.40 mm pitch, 4 mm L | | 1.6 – 2.6 |
| XBM-D068A (68-pos) | B01-000659 | M2 x 0.40 mm pitch, 5mm L | | 2.6 – 4.0 |

### FOR MORE INFORMATION

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