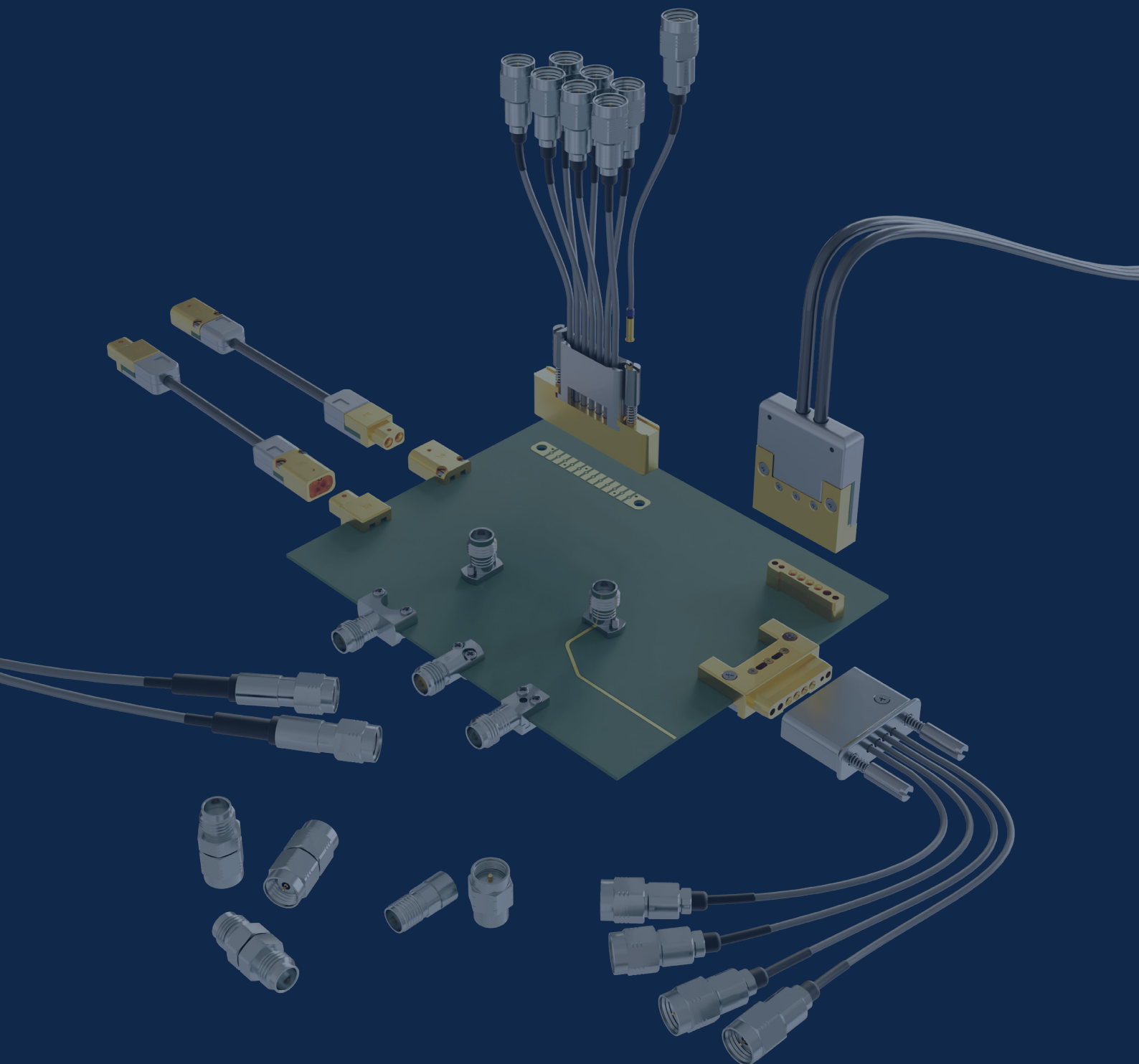




# INTERCONNECT PORTFOLIO

DEPLOY YOUR INSTRUMENTS WITH OUR INNOVATIVE INTERCONNECTS



## ABOUT US

Since 2006, MultiLane has been offering high speed test and measurement equipment for data communications. As the industry has evolved from 10 Gigabit Ethernet to 800G Ethernet, we have kept pace with complete cycle support of data center test solutions encompassing IC and transceiver characterization, host line card testing, and link testing. We provide a range of form factors and architectures, from portable instruments, to stand-alone bench top instruments to automated test platforms. We also assist our customer base with compliance and interoperability test services. We serve developers, module vendors, network installers, and data center operators with high-performance, reliable equipment at an attractive price-point. MultiLane provides leading-edge solutions for the latest data center technologies and well-established technologies, from 800G at 112Gbps/lane to industry-first 1.6T thermal testing solutions, with a comprehensive set of development solutions for MSAs ranging from SFP, DSFP, QSFP, QSFP-DD, QSFP-DD800, and OSFP800.

The MultiLane portfolio encompasses optical and electrical oscilloscopes, bit error rate testers, time domain reflectometers (TDR) for TIA and cable testing, interconnect products, as well as fully automated DAC and transceiver test solutions, and compliance test services for 100G and 800G technologies. Developers, manufacturers, and installers of these new technologies all need the wide portfolio of solutions to be able to do their jobs successfully.



### Higher Density

Responding to increased channel count

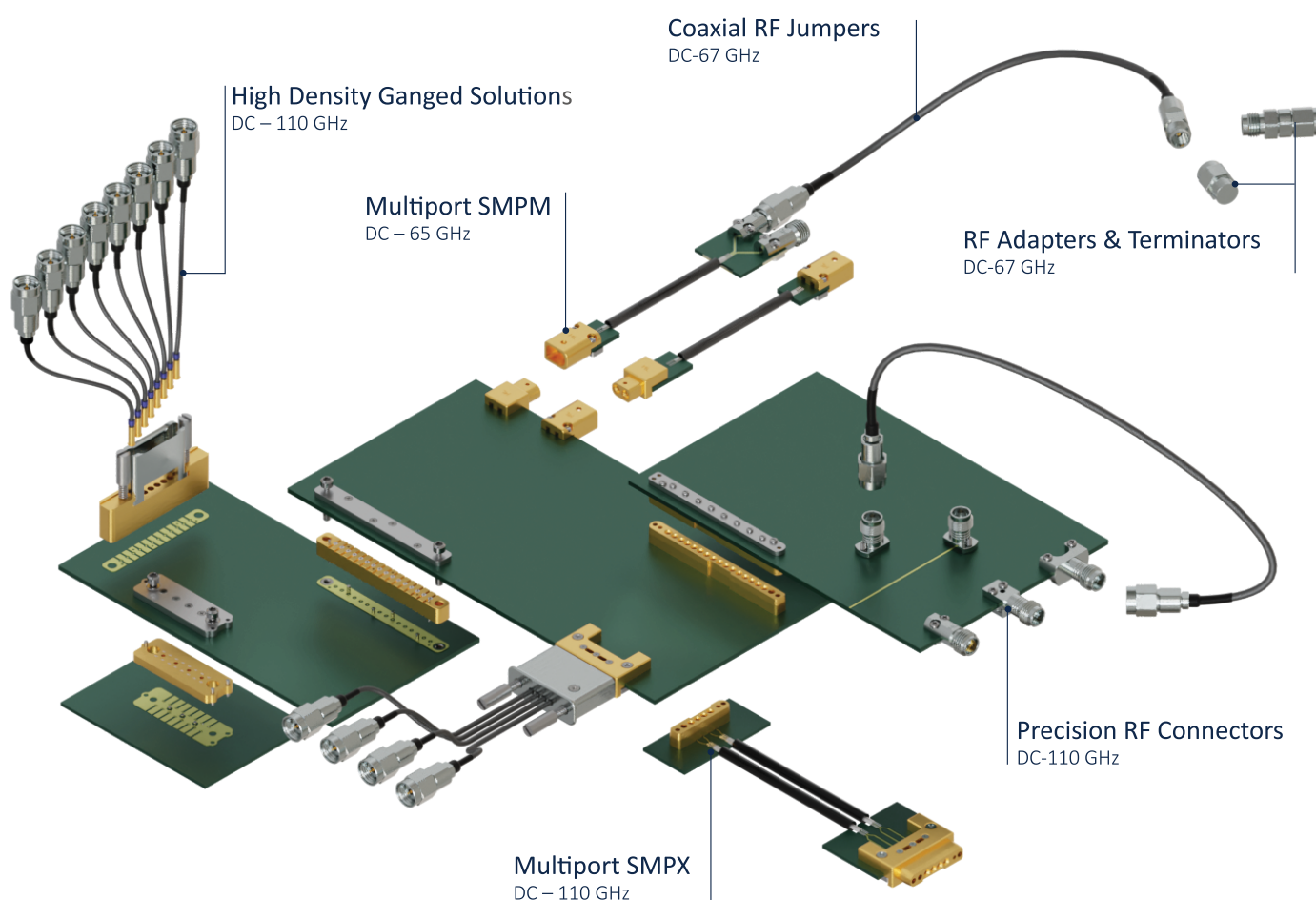


### Higher Performance

Higher Performance Accommodating higher frequency & higher data rates



### Cost Effectiveness & Global Supply



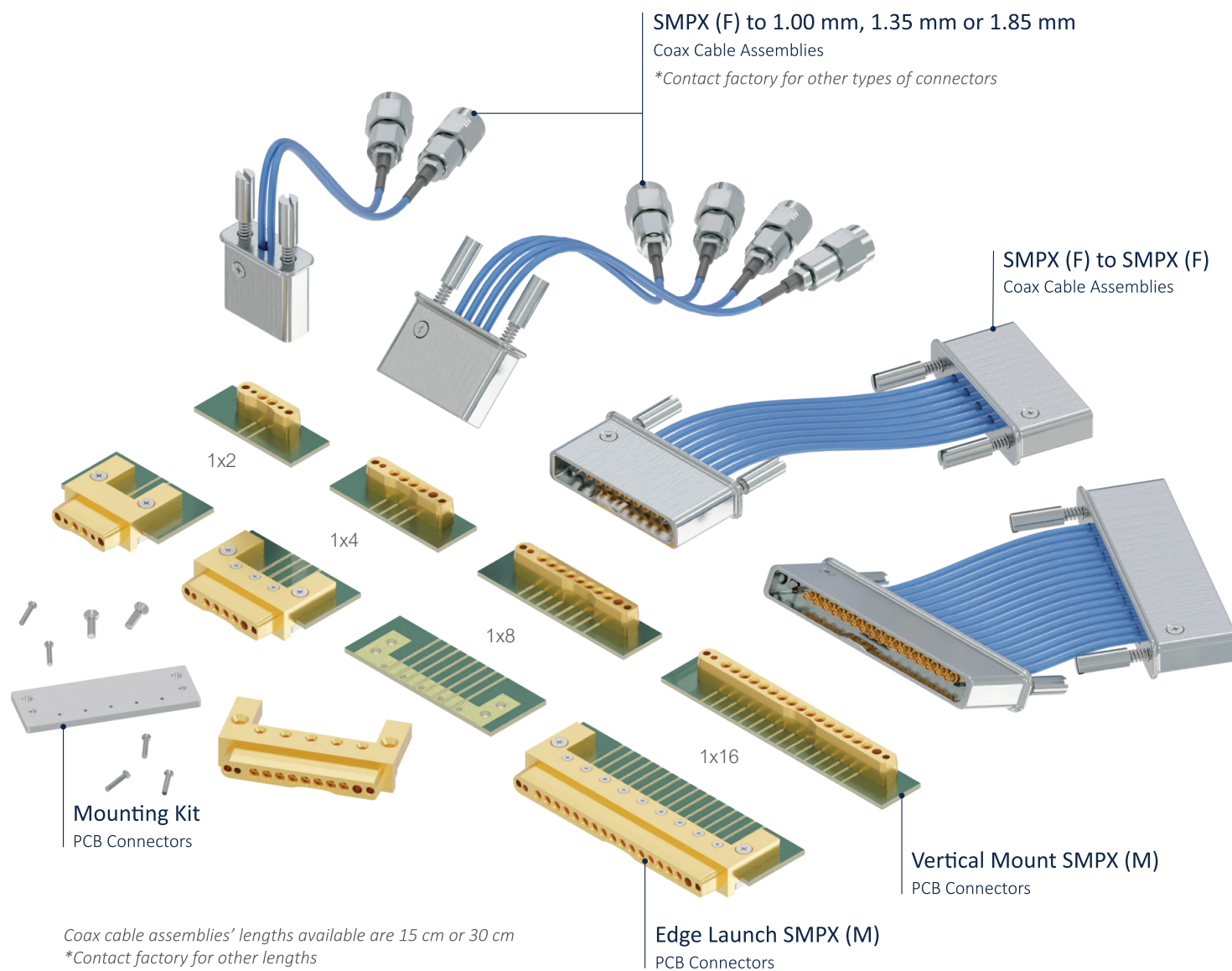
# SMPX Interconnects

An abstract, light blue circuit board pattern on a dark blue background. The pattern consists of various lines, dots, and circles of different sizes, arranged in a complex, interconnected manner that resembles a printed circuit board (PCB) layout. The lines are of varying thicknesses and some are straight, while others are curved or bent at right angles. The dots and circles are also of different sizes and are scattered throughout the pattern, often at the intersections of lines or at the ends of lines.

# SMPX Interconnects | DC - 110 GHz

## Solderless Multiport System

A Comprehensive Offering:



### Features:

- Solderless design
- High density 2.54 mm pitch
- High performance DC-110 GHz
- Blind-mateable mating interface
- Coplanar waveguide & stripline compatible
- Solderless design

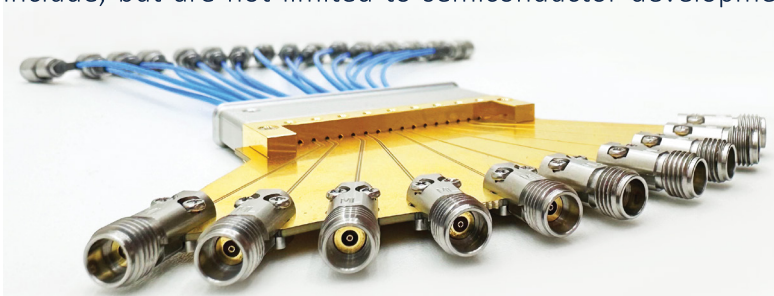
### Benefits:

- Compact footprint
- Easy field installation & replacement for lower cost, fast cycle time and high repeatability
- Fully customizable
- Cost effective

# Multiport SMPX Interconnects

## 224G Ready

The rise in mmWave, 5G, and 224Gbps/lane PAM4 powering the AI revolution calls for a new type of interconnect to ensure consistent and accurate connections. MultiLane SMPX interconnects are a key component of MultiLane tailored to accelerate the development of 224G system architecture. SMPX connector applications include, but are not limited to semiconductor development, ATE testing, and data center testing.



High Performance  
DC - 110GHz

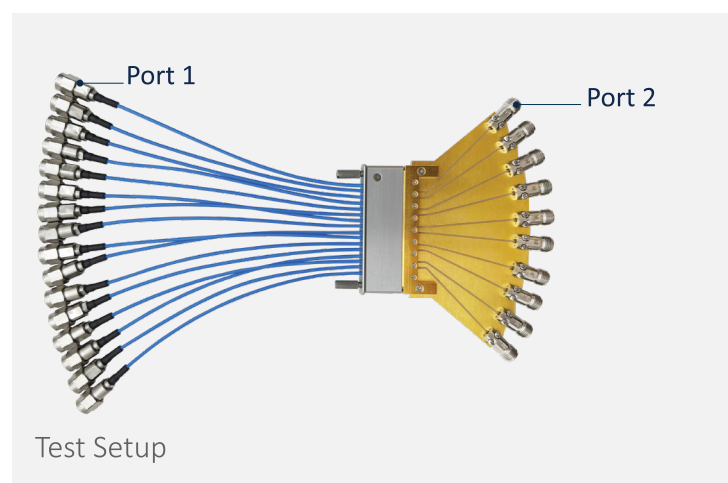
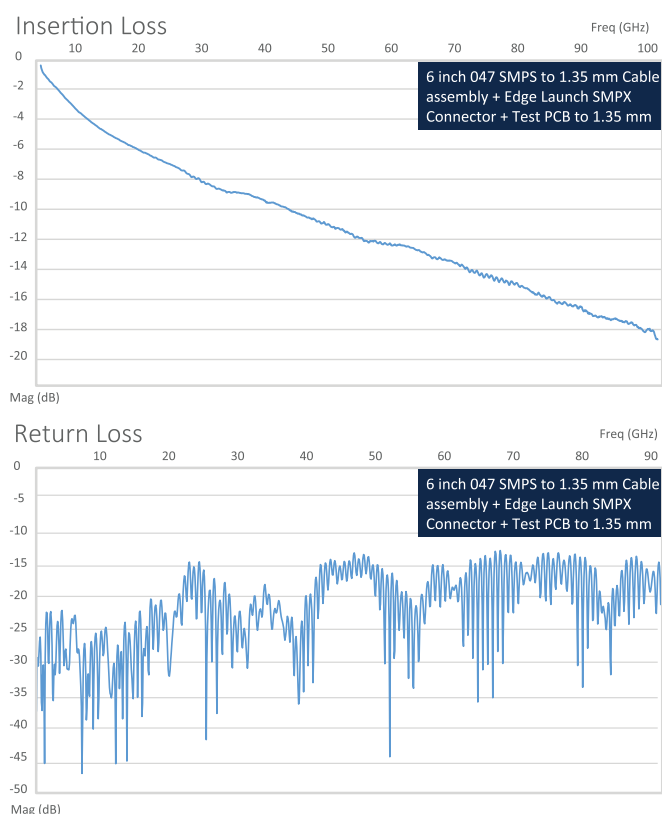
High Density  
Interconnects

Solderless  
Installation

Cost Effective  
Solutions

MultiLane can de-embed any SMPX part as needed. A 2xThru trace to de-embed the board alongside an S2p file for the SMPX Female Cable assembly are available upon request.

Reach out to [sales@multilaneinc.com](mailto:sales@multilaneinc.com)

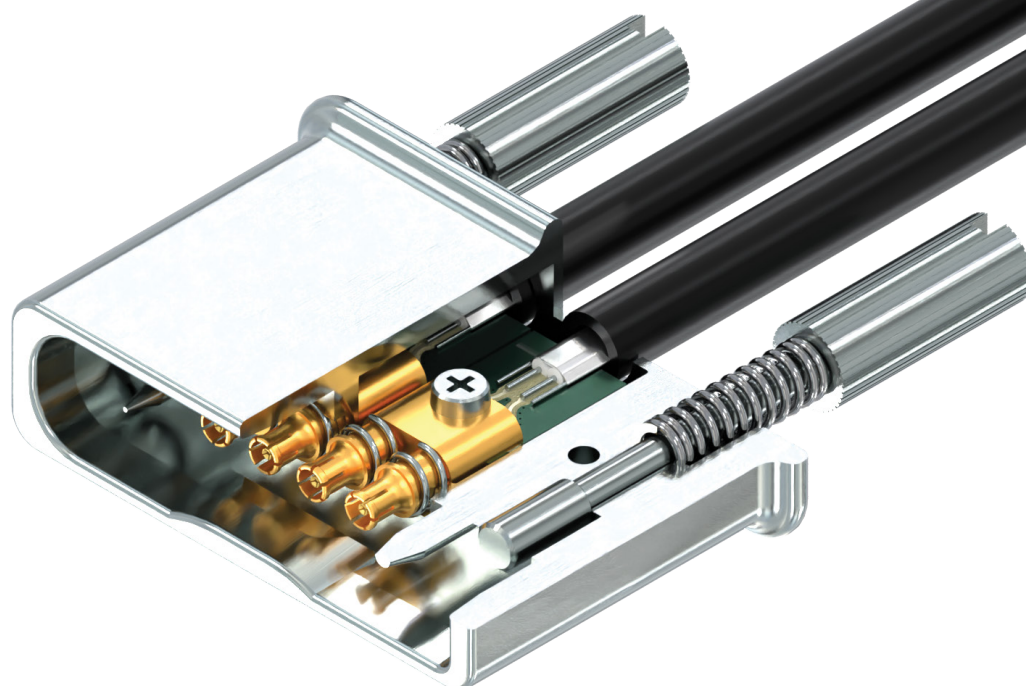


Test Setup for 6 inch 047 SMPX to 1.35mm Cable Assembly + Edge Launch SMPX Connector + Test PCB to 1.35mm

Nominal Impedance	50 ohms
Frequency Range	up to 110 GHz
Insertion Loss	-4dB at 90GHz (De-Embedded)
Return Loss	> 10 dB from 60 GHz to 90 GHz
Shield Effectiveness	> 80 dB

# SMPX Twinax Cable Assemblies

Greater system stability and performance in a tighter package



High Data Rates  
112Gb/s | 224Gb/s

System Stability  
& Reliability

Superior Thermal  
Performance

Design Space  
Efficiency

Cost Effective  
Solutions

Twinax cables transmit a single signal in differential pairs with very low skew, ensuring extra protection from environmental factors.

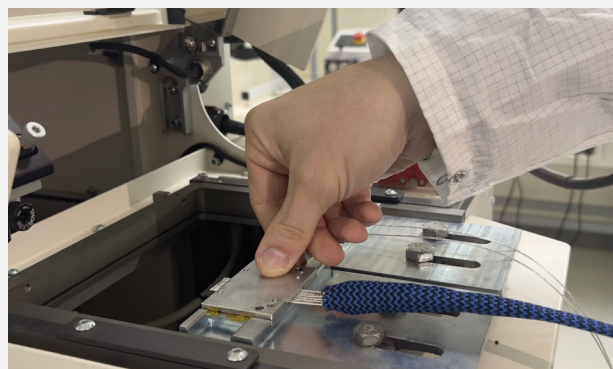
The MultiLane line of twinax SMPX cable assemblies answers three of the most prominent industry trends: cost effectiveness, high density design, and high data rate requirements.

MultiLane SMPX twinax cable assemblies are fully capable of 112Gb/s & 224Gb/s data rates.



MultiLane leverages top-tier industry expertise and technology in twinax cable processing and termination technology to deliver plug and play ready twinax assemblies.

For more information reach out to:  
[sales@multilaneinc.com](mailto:sales@multilaneinc.com)



# SMPM Interconnects

# SMPM Interconnects | DC - 67 GHz

## Subminiature Push On Mini

MultiLane SMPM product line was developed for applications with strict design density limitations and where high performance is crucial. SMPM connector applications include, but are not limited to semiconductor development, ATE testing, and data center testing.

High Performance  
DC - 67 GHz

High Density  
3.5mm pitch

Solderless  
Installation

Highly  
Customizable

Cost Effective  
Solutions

### Key Features

- Male & Female solderless edge launch connectors
- 2 ports configuration
- Compatible with Coplanar Waveguide and Stripline transmission lines
- Configurable footprint to stackup
- Board to board & cable to board mating configurations

#### Adapters

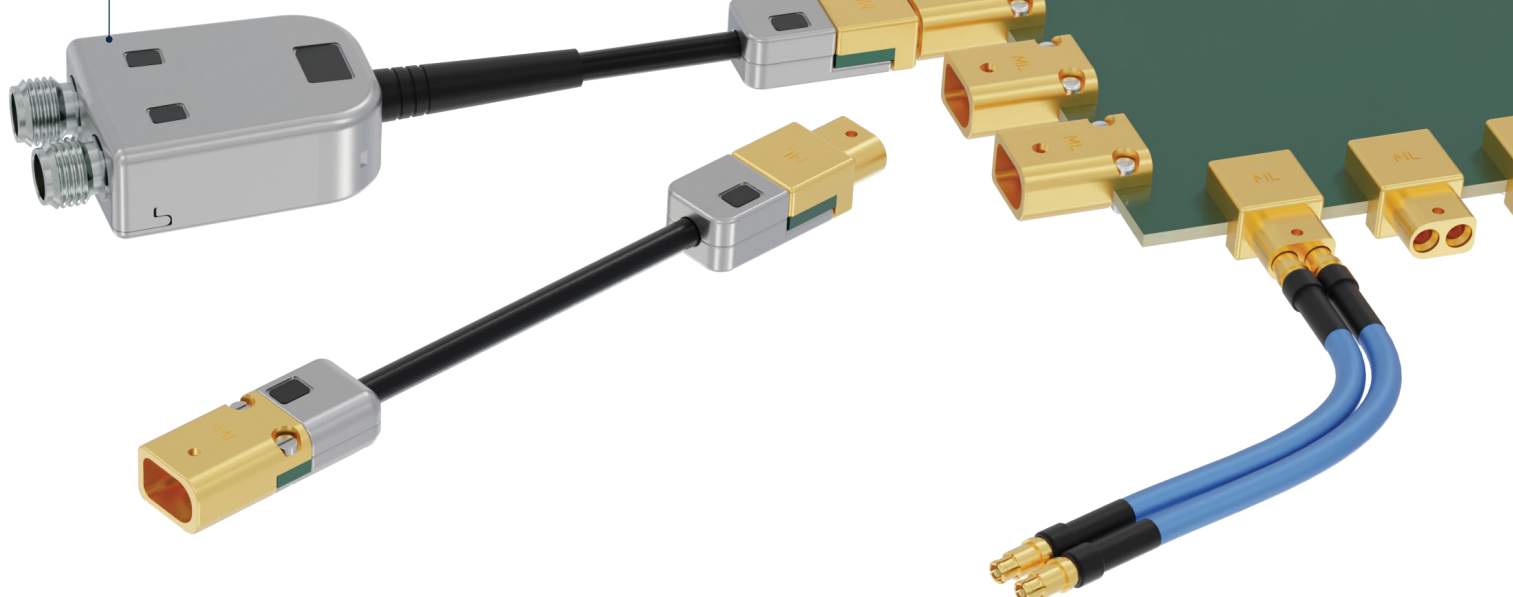
SMPM M or F to 1.85 mm, 2.40 mm & 2.92 mm



#### Twinax Cable Assemblies

SMPM M or F to 1.85 mm, 2.40 mm or 2.92 mm  
Standard cable lengths: 15 cm or 30 cm.

*\*Contact factory for other lengths*



### Twinax Cable Assemblies

- SMPM M to SMPM M
- SMPM M to SMPM F
- SMPM F to SMPM F
- Standard cable lengths: 15 cm or 30 cm

*\*Contact factory for other lengths*

### Coax Cable Assemblies

- SMPM F to SMPM F
- SMPM F to 1.85 mm, 2.40 mm or 2.92 mm
- Standard cable lengths: 15 cm or 30 cm

*\*Contact factory for other lengths*

# Precision RF Interconnects

The background of the entire page is a dark blue color. Overlaid on this background is a complex, light gray pattern of lines and dots, resembling a circuit board or a network diagram. The lines are of varying thickness and form a series of interconnected paths, some straight and some curved. Small circles and dots are placed at various points along these lines, suggesting connection points or nodes in a network. The overall effect is a technical and modern aesthetic.

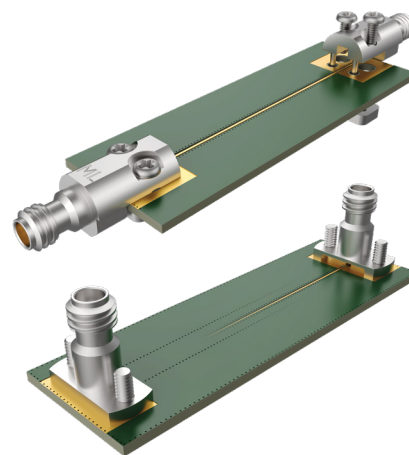
[multilaneinc.com](http://multilaneinc.com)

# Precision RF Interconnects

## An interconnect for every instrument

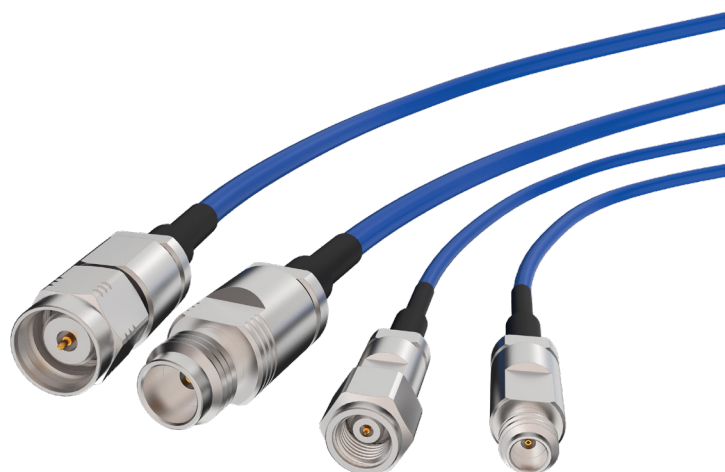
### Solderless Board Mount Precision RF Connectors | DC-110GHz

- Vertical Launch: Coplanar Waveguide and Stripline transmission lines compatible
- Edge Launch: EMI  
Coplanar Waveguide and Stripline transmission lines compatible
- 1.00 mm, 1.85 mm, 2.40 mm, 2.92 mm
- Configurable footprint to stack up
- Test boards available
- Customization offered



### Rf Jumpers | DC-110GHz

- Ø.047 Coax Cables with 1.00mm, 1.85 mm, 2.40 mm & 2.92 mm precision connector interfaces
- Ø.086 Coax Cables with 1.85 mm, 2.40 mm & 2.92 mm precision connector interfaces
- Phase stable assemblies, matched down to +/- 0.15ps available individually and in pairs
- 12 in, 24 in, 32 in, 39 in & custom length available
- 50-ohm cable assemblies
- Customization offered



### Adapters | DC-110GHz

- 1.00 mm, 1.85 mm, 2.40 mm & 2.92 mm
- Between Series & Within Series
- Straight configuration
- 50 ohms coaxial adapters
- Rated to 500 mating cycles typical



### Terminators | DC-110GHz

- 1.00 mm, 1.85 mm, 2.40 mm & 2.92 mm
- Male & Female straight configuration
- 50 ohms coaxial terminators
- Rated to 500 mating cycles typical



Revision No.	Last Modified
0.1	September 2025

# multiLane



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