

SMPX Solution

2024



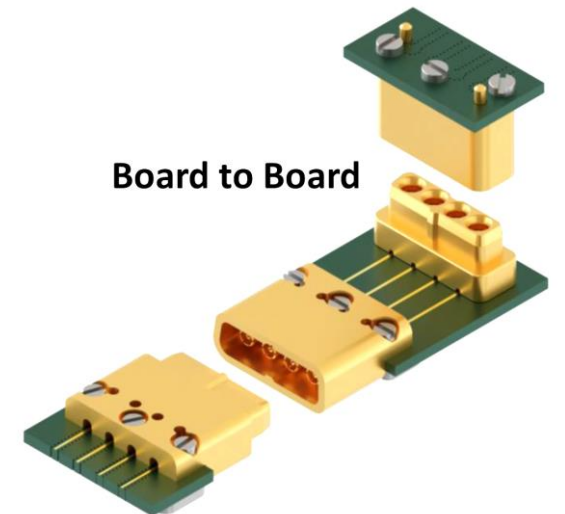
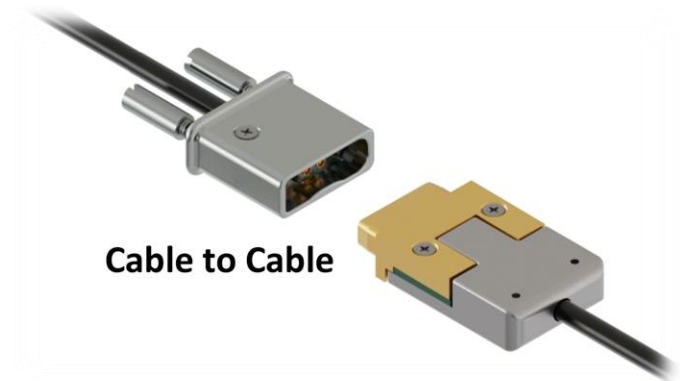
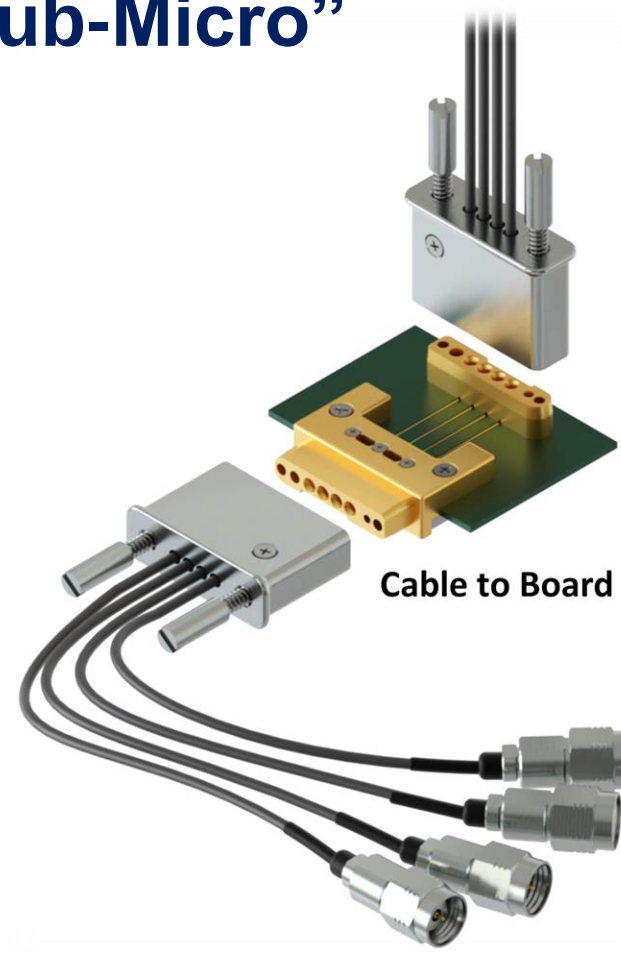
“Sub Miniature Push-On Sub-Micro”

Interconnect System

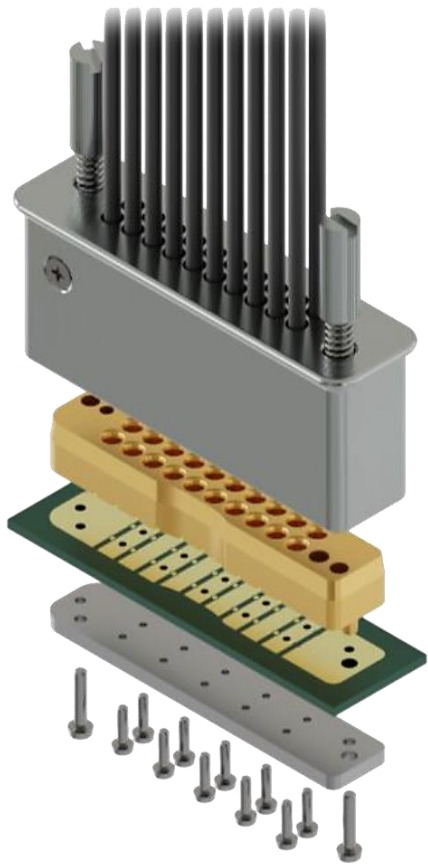
Vertical Mount PCB Connectors
Edge Launch PCB Connectors
Coax Cable Assemblies
Twinax* Cable Assemblies **Coming soon*
Precision Adapters
Coplanar Waveguide & Stripline Compatible

High Density Applications

Multiple Configurations available
Single or double rows
2, 4, 8, or 16 channels
Customizable



110GHz Multiport Solderless Systems



Features

Blind-mate Interface

~0.9lbs mate force

~1.5lbs de-mate force

Solderless Mounting

High Frequency: 110 GHz (50 ohms)

High Density 2.54 mm pitch

Multiple Standard Configurations

Benefits

Compact footprint

Easy installation & single channel replacement

Fast cycle time and high repeatability

Fully customizable

Cost effective

Applications

Enables 224Gbps Ecosystems

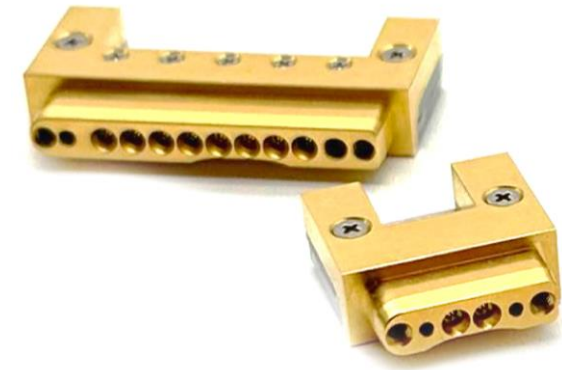
Semiconductor Development

ATE Test System

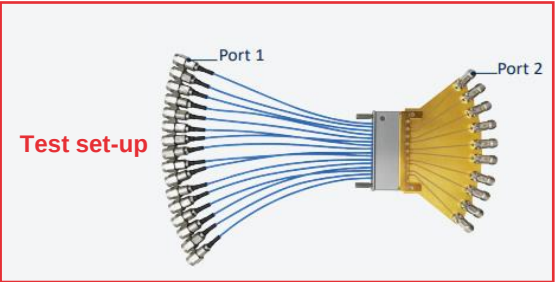
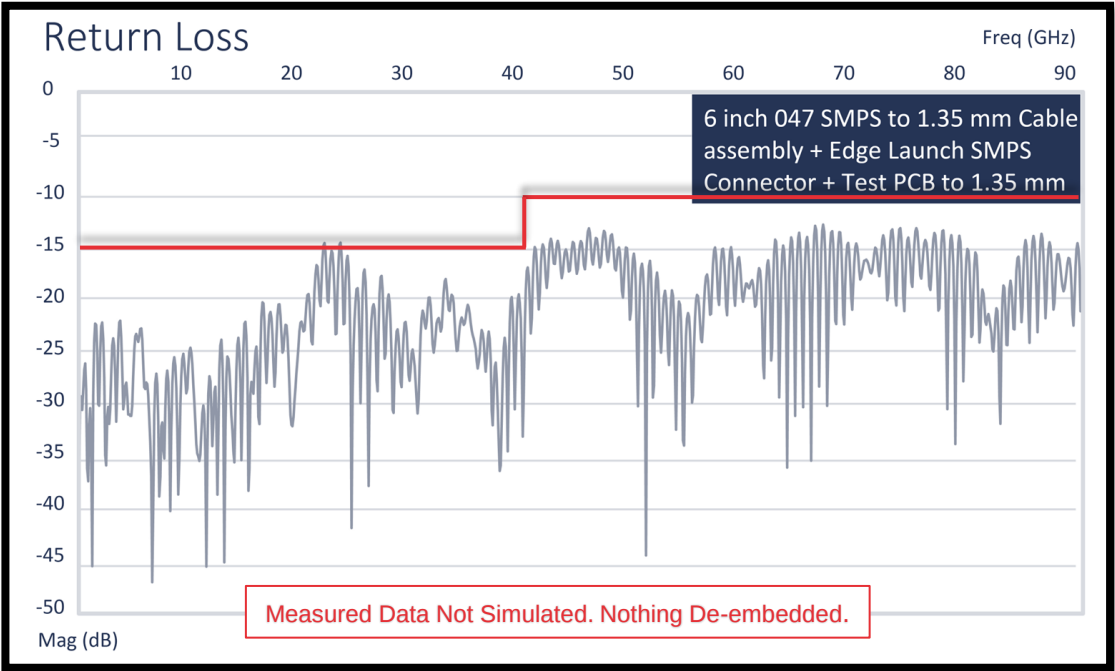
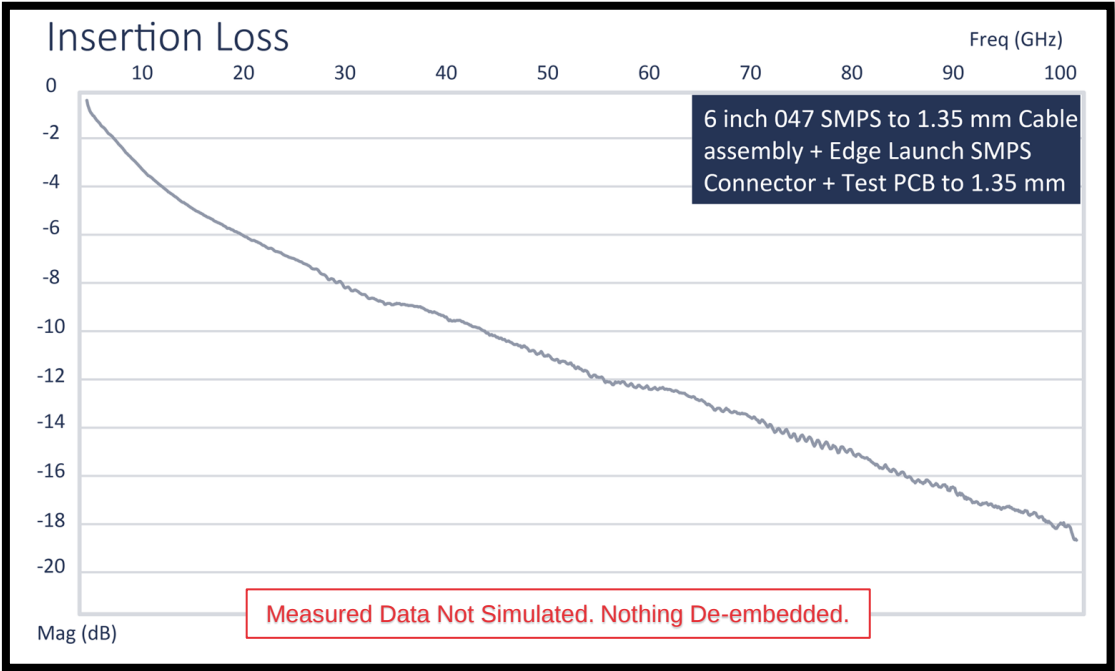
Probe Card Interface

Data Center Test

Defense Applications



Performance

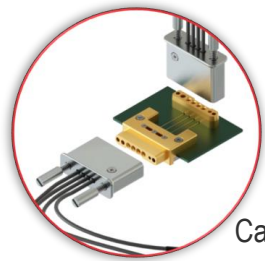


Normal Impedance	50 ohm
Frequency	DC to 110 GHz
Insertion Loss	- 4dB @ 90GHz (de-embedded)
Return Loss	> 10dB, 60GHz – 90GHz
Shield Effectiveness	> 80dB

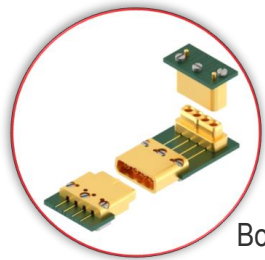


Vertical Mount Connectors

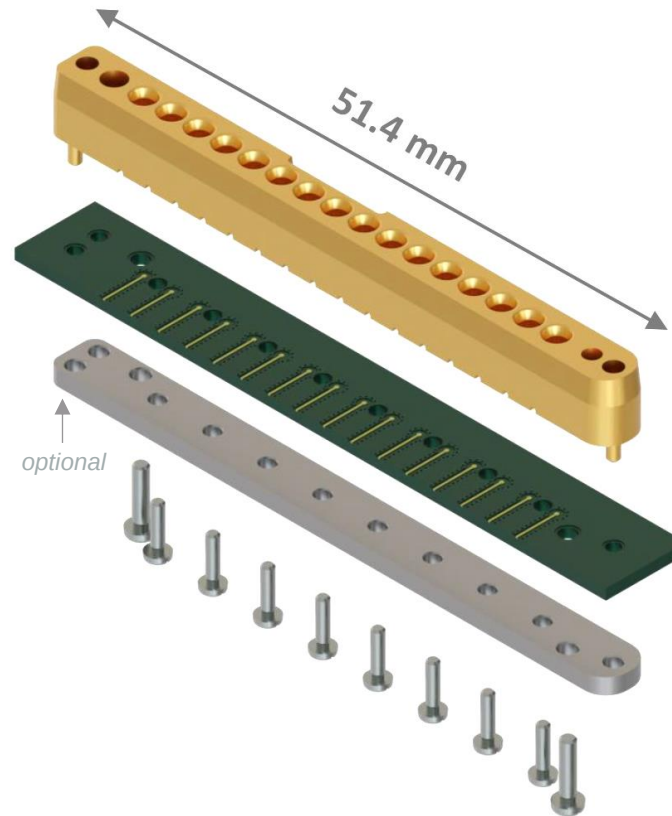
110 GHz (50 ohms)
2.54 mm Pitch
10k Mate Cycles
Solderless Mounting
Blind Mate
Multiple Configurations
Customizable



Cable to Board



Board to Board



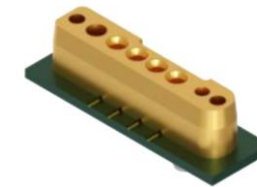
1 x 16 SMPX

PN: W2S101-40ML3-16



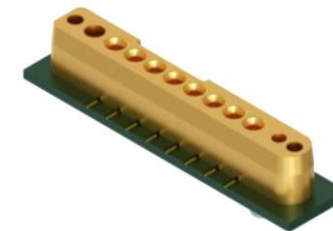
1 x 2 SMPX

PN: W2S101-40ML3-02



1 x 4 SMPX

PN: W2S101-40ML3-04



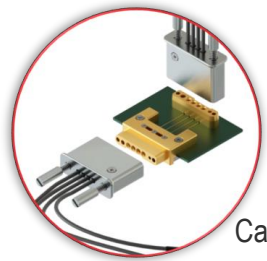
1 x 8 SMPX

PN: W2S101-40ML3-08

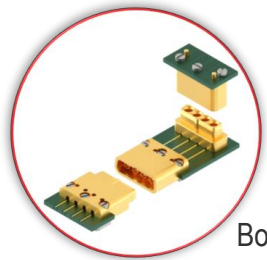
Variety of PCB plating options acceptable.

Edge Mount Connectors

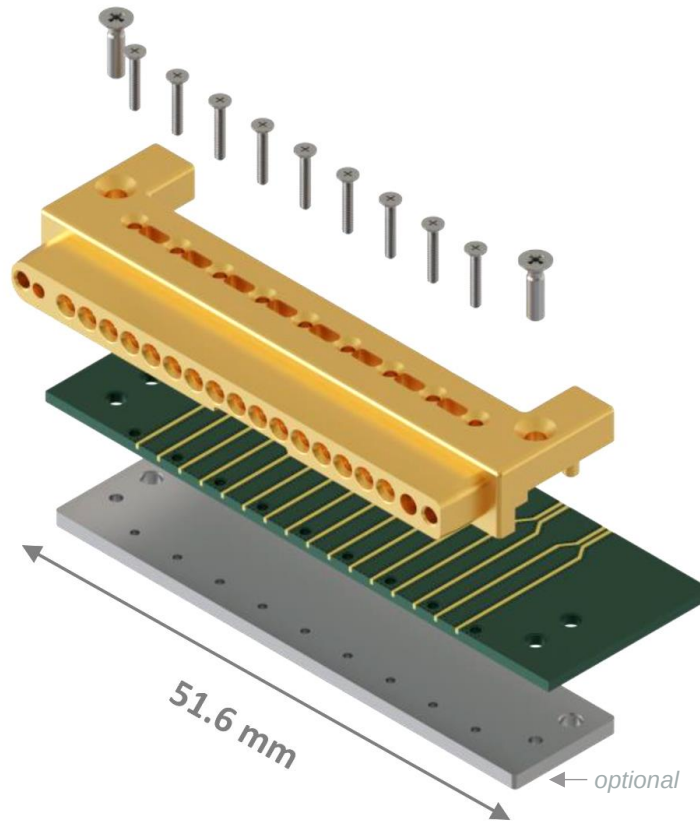
110 GHz (50 ohms)
2.54 mm Pitch
10k Mate Cycles
Solderless Mounting
Blind Mate
Multiple Configurations
Customizable



Cable to Board

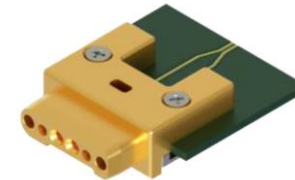


Board to Board



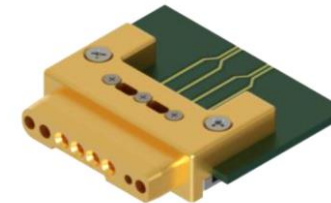
1 x 16 SMPX

PN: W2S201-40ML3-16



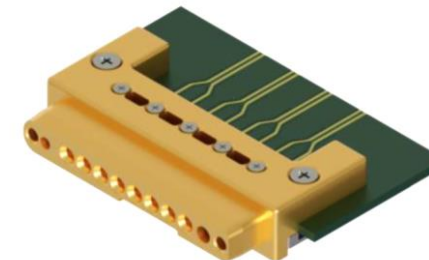
1 x 2 SMPX

PN: W2S201-40ML3-02



1 x 4 SMPX

PN: W2S201-40ML3-04



1 x 8 SMPX

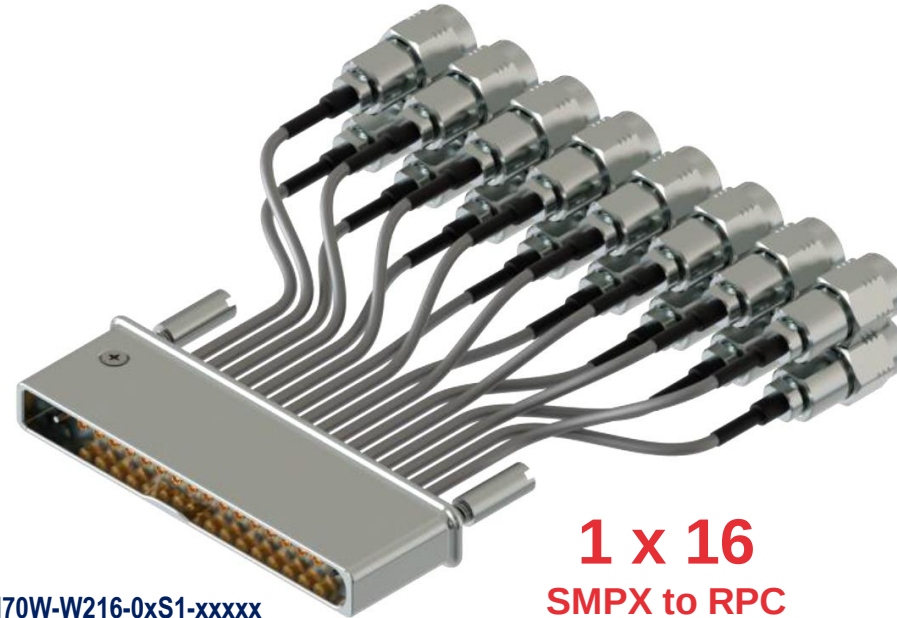
PN: W2S201-40ML3-08

Variety of PCB plating options acceptable.

110GHz Multiport Solderless Systems

SMPX to Precision Coax Assembly

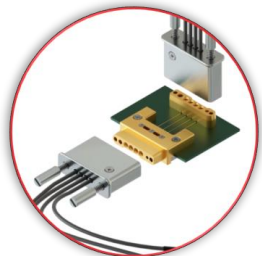
0.47 Coax
110 GHz (50 ohms)
10k Mate Cycle
2.54 mm Pitch
Blind Mate
Easy installation & replacement
Multiple Configurations
Customizable



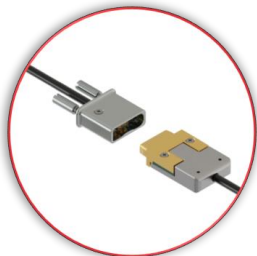
PN: H70W-W216-0xS1-xxxxx



available:
RPC-1.00
RPC-1.35
RPC-1.85
RPC-2.40
RPC-2.92



Cable to Board



Cable to Cable



1 x 2
SMPX to RPC

PN: H70W-W202-0xS1-xxxxx



1 x 4
SMPX to RPC

PN: H70W-W204-0xS1-xxxxx



1 x 8
SMPX to RPC

PN: H70W-W208-0xS1-xxxxx

110GHz Multiport Solderless Systems

SMPX to SMPX Coax Assembly

0.47 Coax

110 GHz (50 ohms)

10k Mate Cycle

2.54 mm Pitch

Blind Mate

Easy installation & replacement

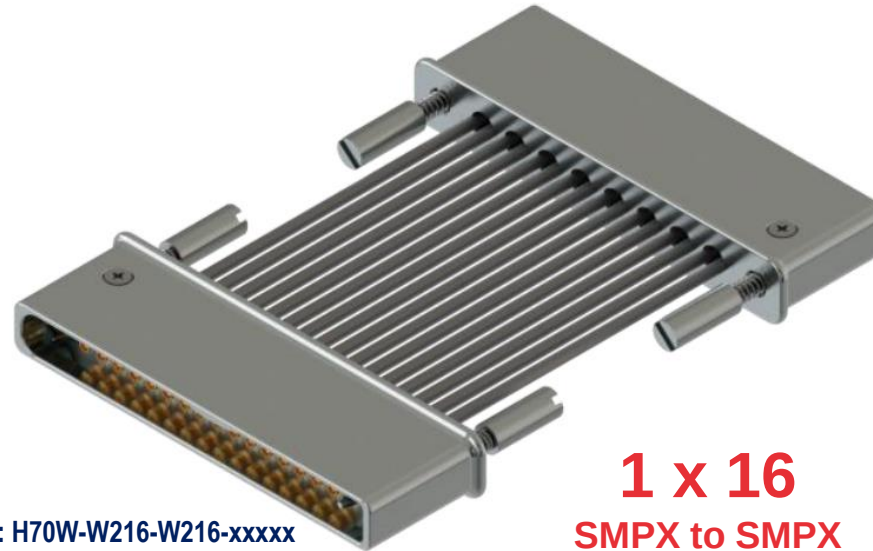
Multiple Configurations

Customizable:

Cable: 0.20, 0.31, 0.63 coax

Shells

Thumb Screws



PN: H70W-W216-W216-xxxxx

1 x 16
SMPX to SMPX



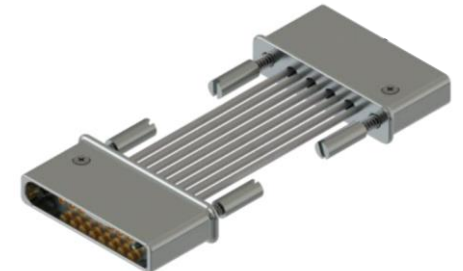
1 x 2
SMPX to SMPX

PN: H70W-W202-W202-xxxxx



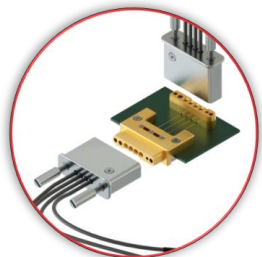
1 x 4
SMPX to SMPX

PN: H70W-W204-W204-xxxxx

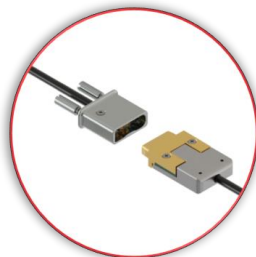


1 x 8
SMPX to SMPX

PN: H70W-W208-W208-xxxxx



Cable to Board



Cable to Cable

SMPX & Precision Twinax Assembly

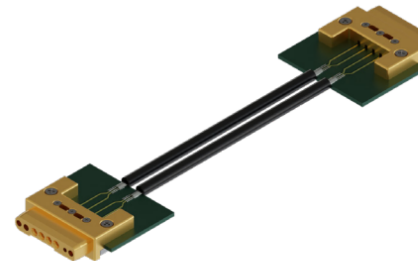
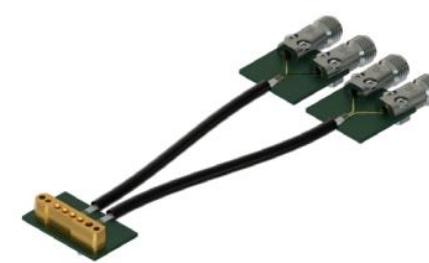
**Coming soon*

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

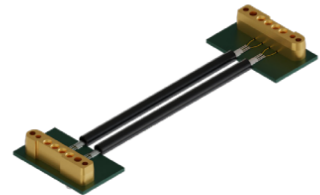
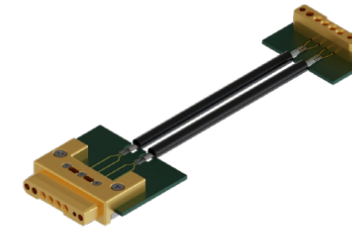
- 112Gb/s and 224Gb/s data rates.
- High Density
- Cost Effective



SMPX to Precision Connectors

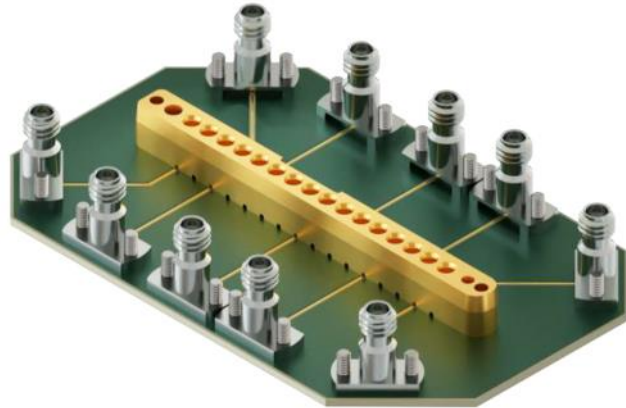


SMPX to SMPS Board to Board



SMPX to SMPX Cable to Cable





Development Support & Services

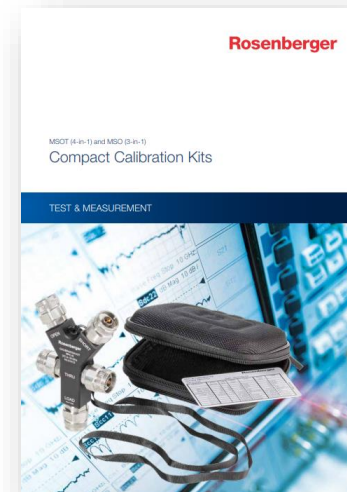
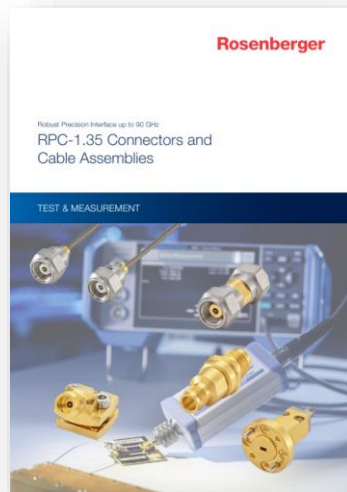
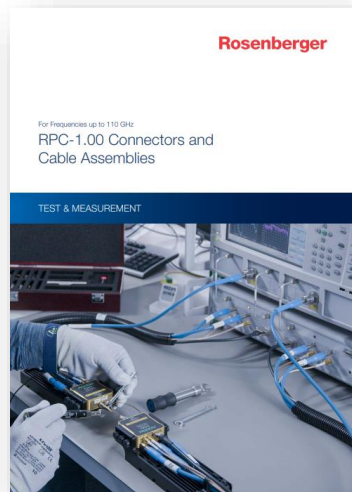
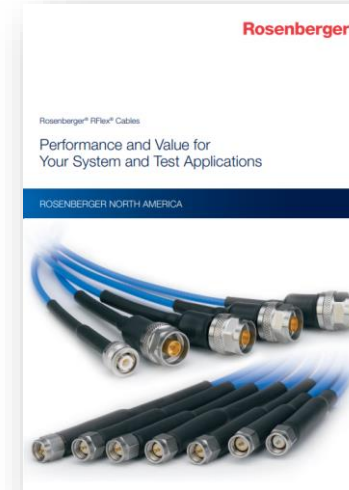
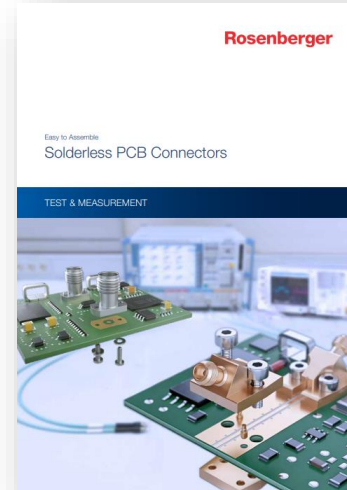
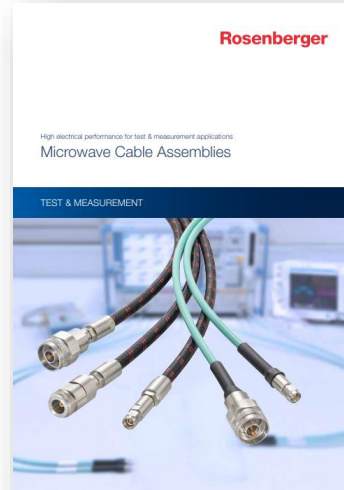
- Mechanical & Electrical simulation files provided for your own testing & validation.
- Footprint Optimizations.
- Comprehensive Precision Test Portfolio.
- Design, prototyping, and validation all done in-house.
- Evaluation Boards available in several configurations:

	1 x 16	1 x 8	1 x 4	1 x 2
SMPX Edge Launch				
SMPX Vertical Launch				

110GHz Multiport Solderless Systems

Complimentary Products

Precision PCB Connectors
Microwave Test Cables
RF Flex Cable Assemblies
Test Adaptors
Calibration Kits
Lab Tool Kits
PCB Footprint Optimization
And more...



Contact us:

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