

# **NanoRF Modules and Contacts**

High Frequency Nanominiature Coax Contact with High Density Modular Packaging, Designed for Extreme Rugged Environments

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High Frequency Nanominiature Coax Contact with High Density Modular Packaging

#### LIGHTER WEIGHT

- Small contact size with higher RF contact density enables smaller packaging
- Aluminum modules available for weight reduction

#### **MODULAR**

- Blind-mateable float-mounted backplane contacts for moduleto-module or box-to-box architecture
- Multiple cable types to fit application requirements - designed for .047 inch coax cable

#### **RELIABLE**

- Low loss and excellent isolation optimized design for signal integrity
- TE tested to vibration requirements per VITA 72

#### **INDUSTRIES**

- Military Electronics
- C4ISR
- Electronic Warfare (EW)

#### **APPLICATIONS**

 Embedded Computing - VPX modules and Radar processing

### Twice the Density of VITA 67 RF Modules

A higher density RF coax module, twice the density of VITA 67 SMPM RF modules used in VPX embedded computing applications. Half and full size module sizes can retain up to 12 or 18+ RF contacts, with options for customizing contact count and position. The daughtercard modules are mounted to the card in the VPX Plug-In module, and the backplane module into the chassis backplane.

The interface features a floating insert to pre-align RF contacts before engagement. Radial and axial contact float assures final alignment of the contacts and keeps the contacts fully engaged for excellent RF performance under harsh environments.

The contact design supports frequencies up to 70 GHz, and is designed to terminate to standard .047" semirigid and flexible cables. Additional cable options are to be released in 2019.





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#### **MATERIALS**

- Aluminum and stainless steel options for modules
- Copper alloy, 50 uin gold plating, PTFE dielectrics

#### **ELECTRICAL**

- Excellent RF performance through 60 GHz
- Isolation minimum 100 dB up through 27 GHz

#### **MECHANICAL**

- Supports as low as 0.110 inch contact pitch
- Fits in VPX systems packaging requirements
- 500 mating cycles durability
- Meets high vibration requirements of VITA 72

#### **APPLICATION TOOLING**

• No special tooling required

#### **PRODUCT INFORMATION**

PRODUCT INF	ORMATION			
Modules	<b>Module Size</b>	Material	Positions	Part No.
Backplane	Half Module	St Steel	8	2828434-1
	Half Module	Aluminum	8	2828434-2
	Half Module	St Steel	12	2313228-1
	Half Module	Aluminum	12	2313228-2
	Half module (V67.3D)	St Steel	12	2313376-1
	Half module (V67.3D)	Aluminum	12	2313376-2
	Full Module	St Steel	16	2828395-1
	Full Module	Aluminum	16	2828395-2
	Full Module	St Steel	18	2322337-1
	Full Module	Aluminum	18	2322337-2
Daughtercard	Half Module	St Steel	8	2828431-1
	Half Module	Aluminum	8	2828431-2
	Half Module	St Steel	12	2313225-1
	Half Module	Aluminum	12	2313225-2
	Full Module	St Steel	16	2828392-1
	Full Module	Aluminum	16	2828392-2
	Full Module	St Steel	18	2322335-1
	Full Module	Aluminum	18	2322335-2
Backplane Contact Kit				2302345-1
Daughtercard Contact Kit				2302339-1





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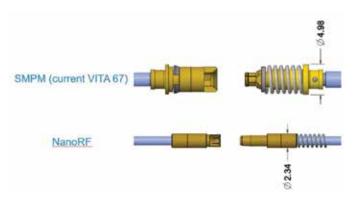


**Guide Pins** 





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Consult TE for the latest dimensions and design specifications.

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