

## R-VPX Evolution

### Ruggedized VITA 46 interconnect system

### High-Speed Evolution



#### Description

Evolution is specifically designed to support the latest high-speed protocols while still meeting open VPX requirements. Evolution meets the performance requirements of VITA 46 & 47 while still intermateable with existing VITA 46 backplane connectors.

This connector systems is optimized for speed and for ruggedness to handle harsh environment requirements in many applications across the board.

#### Benefits

- Modular COTS lightweight connector system
- Ruggedized 4 points contact system
- Low mating force connector system
- Contact current rating 1.5 Amps
- Can be combined with high power modules, optical modules (VITA 66) and RF Modules (VITA 67)

#### Features

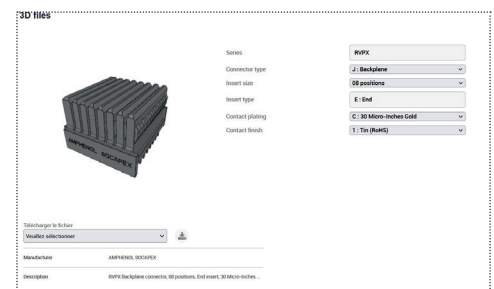
- 16 Gb/s+ performance
- 4 points contact system
- Module connector has modified footprint - utilizes smaller compliant contacts for increased Si performance
- Backplane connector is the legacy connector - no changes necessary on the backplane
- Intermateable with existing/legacy VITA 46 connectors
- Footprint compliant with 46.30 Spec

#### Supported high-speed protocols

- PCIe Gen 4 and Gen 5
- 1000BASE-KX, 10GBASE-KX4 and 100GBASE-KR4
- Infiniband SDR, DDR, and QDR
- Serial RapidIO 12.5 Gbaud and 25 Gbaud

#### Online configurator & 3D model download

You can define references according your needs and download directly 3D models in several formats on R-VPX product page in our website [www.amphenol-socapex.com](http://www.amphenol-socapex.com) or scan QR code :



#### Markets



Commercial Aerospace



Military Aerospace



Electronic Systems / C5ISR



Ground Vehicle



Missiles



Space

# R-VPX

## Daughter card configuration: How to order

1.	2.	3.	4.	5.	6.
Connector Type	Gender	Size	Insert Type	Plating	Contact Finish
RVPX-	PE	16	D	M	1

### 1. Connector Type

**RVPX-** Rugged High Speed Board

### 2. Gender

**P** Module 10 Gb/s  
**PE** Evolution Module 16 Gb/s

### 3. Size

**08** 8 Position Insert  
**16** 16 Position Insert

### Daughter Card

Module Position	Part No.	Amphenol R-VPX Connectors
P0	RVPX-P08VCX*	RVPX-P08VMX*
P1, P2, P3, P4, P5, P6	Differential	RVPX-P16DCX* RVPX-P16DMX*
	Single-Ended	RVPX-P16SCX* RVPX-P16SMX*
Keying Guide Modules	RVPX-HMD-X**	RVPX-HMM-X**

\* Refer to Step 6 (Contact Termination Finish) to complete part number.

\*\* Contact us for available keying orientation

### 4. Insert type

**D** Differential  
**S** Single-Ended  
**P** Power  
**V** Standard VITA 46 P0

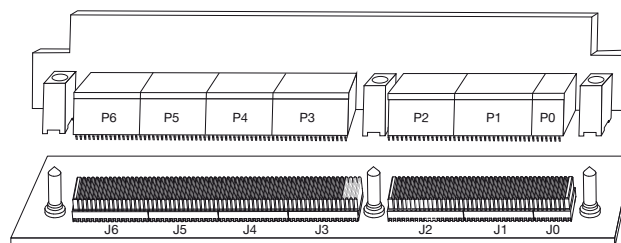
### 5. Plating

**M** 50 Micro-Inches Gold  
**C** 30 Micro-Inches Gold

### 6. Contact Termination Finish

**1** Tin ✓  
**2** Tin-Lead

✓ RoHS compliant



## Backplane configuration: How to order

1.	2.	3.	4.	5.	6.
Connector Type	Gender	Size	Insert Type	Plating	Contact Finish
RVPX-	J	16	E	M	1

### 1. Connector Type

**RVPX-** Rugged High Speed Board

### 2. Gender

**J** Backplane

### 3. Size

**08** 8 Position Insert  
**16** 16 Position Insert

### Backplane

Module Position	Part No.	Amphenol R-VPX Connectors
J0	RVPX-J08ECX*	RVPX-J08EMX*
J1, J3, J4, J5	RVPX-J16MCX*	RVPX-J16MMX*
J2, J6	RVPX-J16ECX*	RVPX-J16EMX*
Keying Guide Modules	RVPX-HDP-X**	RVPX-HPM-X**

\* Refer to Step 6 (Contact Termination Finish) to complete part number.

\*\* Contact us for available keying orientation

### 4. Insert type

**M** Middle  
**E** End

### 5. Plating

**M** 50 Micro-Inches  
**C** 30 Micro-Inches

### 6. Contact Termination Finish

**1** Tin ✓  
**2** Tin-Lead

✓ RoHS compliant

