



# 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



C6ISR, Battlefield,  
Ground Vehicles



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

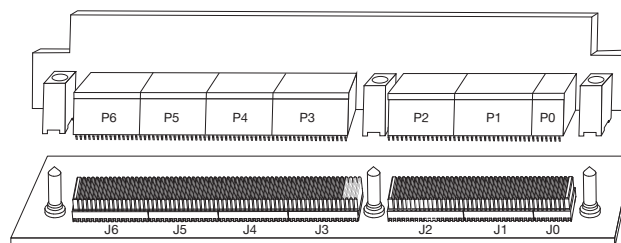
### 5. Plating

**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

