

# R-VPX Ruggedized

VITA 46

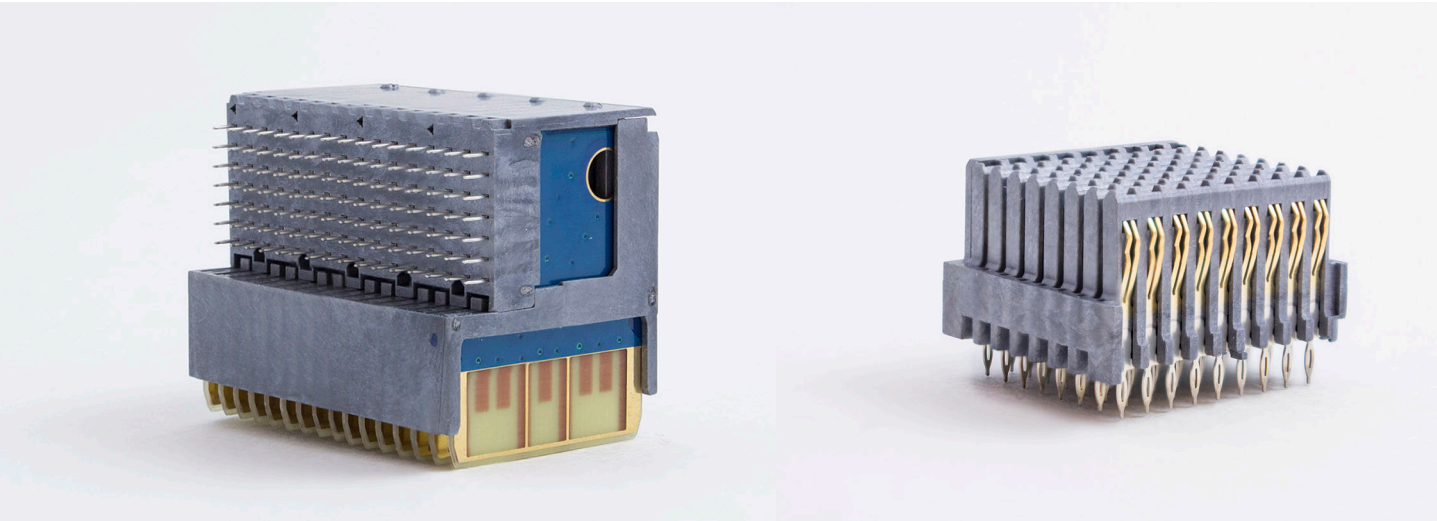
For High Speed Embedded Computing Applications



# Table of Content:

Table of Content:	2
R-VPX Ruggedized vita 46	3
R-VPX Overview:	4
R-VPX Overview:	5
R-VPX Part Number List:	6
Daughter Card: How to Order	7
Daughter Card: 8 Position Half Left End Module	8
Daughter Card: 16 Position Center Differential Module	9
Daughter Card: 16 Position Center Single End	9
R-VPX EVOLUTION SERIES	10
Evolution Series- High Speed evolution	
Daughter Card: Right-Angle Plug Assembly, 16 Center	11
Backplane: How to Order	12
Backplane: 8 Position Left End Backplane	13
Backplane: 16 Position Middle Backplane	14
Backplane: 16 Position Right End Backplane	15
R-VPX Rear transition Module Part Number List:	16
R-VPX Rear transition Module Part Number List:	17
Rear transition Module: Right Angle Plug Assembly, Half Left End, Daughtercard Differential	18
Rear transition Module: Right Angle Plug Assembly, Center RVPX Daughtercard Differential	19
Rear transition Module: Right Angle Plug Assembly, Center RVPX Daughtercard	20
Rear transition Module: Right Angle Plug Assembly, Center RVPX Daughtercard Differential	21
Rear transition Module: Right Angle Plug Assembly, Center RVPX Daughtercard Differential-SE	22
Backplane: Rear Transition Module Center	23
Backplane: Rear Transition Module Vertical Receptacle Center, Partial Load	24
Backplane: Rear Transition Module Vertical Receptacle Center, Partial Load	25
Hardware: Zinc Die Cast Guide Modules	26
Hardware: Machined Aluminum Guide Modules	27
Hardware: Zinc Die Cast Guide Pins	28
Hardware: Machined Stainless Steel Guide Pins	29
Tools: Backplane Connector Removal	30
INSTALLATION	31

# R-VPX Ruggedized VITA 46



Amphenol's R-VPX is a ruggedized, high-speed, board-to-board interconnect system capable of data rates in excess of 10 Gbps, meeting and exceeding VITA 46 standards. This connector system gives users modularity and flexibility by utilizing PCB wafer construction with customized wafer-loading patterns.

R-VPX Ruggedized VITA 46 Connectors are designed for embedded computing applications in:



Commercial and Military Aerospace



Electronic Systems - C4ISR



Missile Defense



Ground Systems



Space Systems



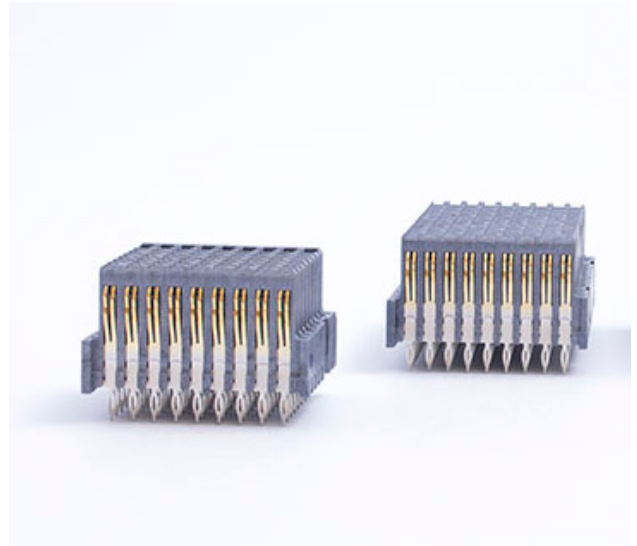
Other Ruggedized Environments



# R-VPX Overview:

## FEATURES & BENEFITS:

- Qualified to VITA 46 for Open VPX applications
- Fully intermountable & intermateable to existing VITA 46 connectors
- Meets and exceeds VITA 47
- Modular COTS lightweight connector system
- Low mating force connector system
- Pin-Less backplane connector family
- Supports .8 inch card slot pitches
- Up to 140 signals per inch
- Contact current rating 1.5 Amps
- Can be combined with high power modules, RF Modules (VITA 67) and Optical modules (VITA 66)



## SUPPORTED HIGH-SPEED PROTOCOLS

- 1000BASE-KX
- 10GBASE-KX4
- 10GBASE-KR10
- 40GBASE-KR4
- InfiniBand SDR, DDR, and QDR
- PCIe Gen 1, 2, and 3
- Serial RapidIO 2.5, 3.125, 5, and 6.25 Gbaud

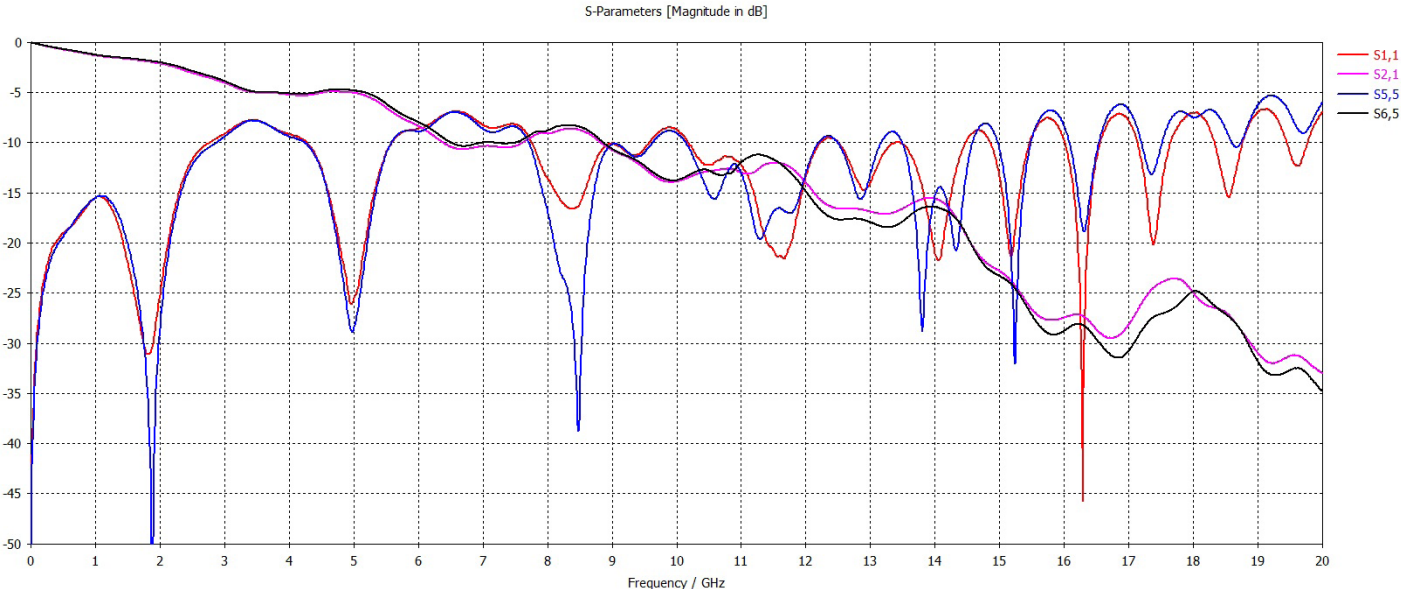


## PRODUCT DEVELOPMENT

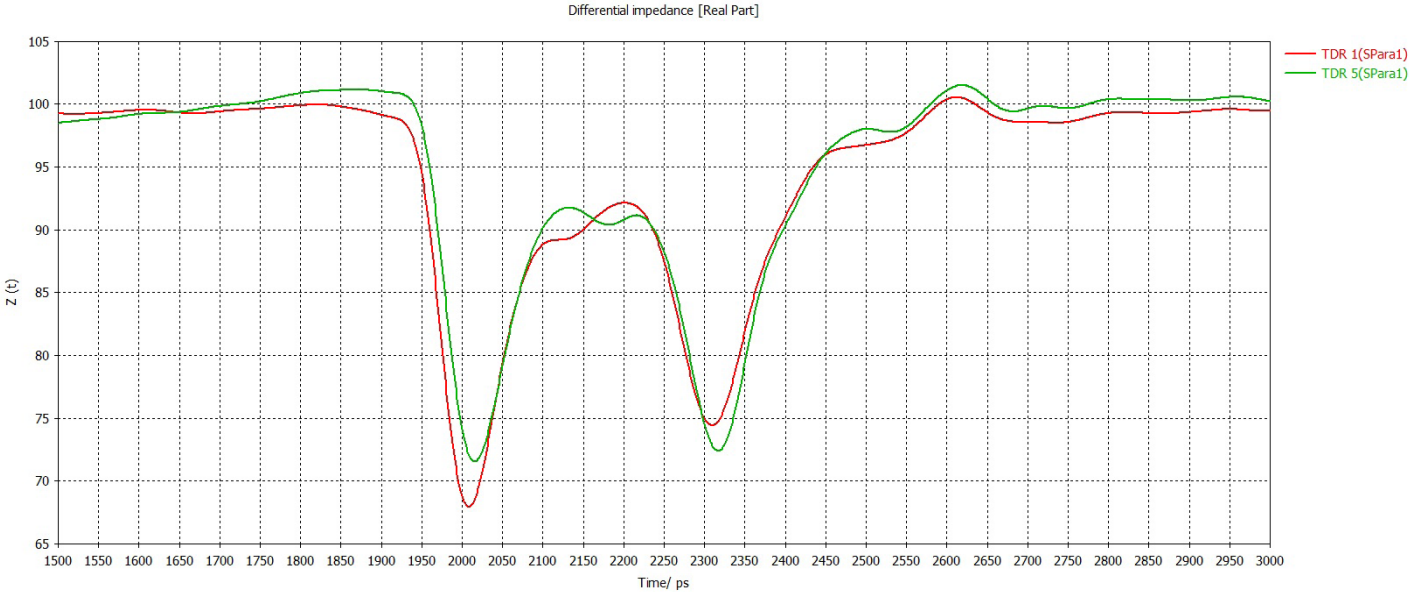
- 16 Gb/S VITA 46 Connectors: available in 2018.
- 25+ Gb/S VITA 46 Connectors: available by the end of 2018.

# R-VPX Overview:

## Signal Integrity Comparison: Insert and Return Loss



## Signal Integrity Comparison: Impedance



Note  $\approx$  44 ps 10-90% TDR Rise time

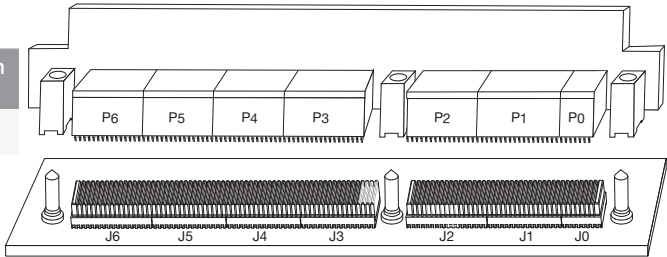
## R-VPX Part Number List:

Part Number	Gender	Size	Insert Type	Plating	Contact Finish
RVPX-P08VM1	Std Module	8	P0 V- VITA 46	50 Micro-Inches	Tin
RVPX-P08DM1	Std Module	8	P0 Differential 10Gb/s	50 Micro-Inches	Tin
RVPX-P08SM1	Std Module	8	P0 Single-Ended	50 Micro-Inches	Tin
RVPX-P08PM1	Std Module	8	P0 Power	50 Micro-Inches	Tin
RVPX-P16DM1	Std Module	16	P1-P6 Differential 10Gb/s	50 Micro-Inches	Tin
RVPX-PE16DM1	Evolution Module	16	P1-P6 Differential 16Gb/s	50 Micro-Inches	Tin
RVPX-P16SM1	Std Module	16	P1-P6 Single-Ended	50 Micro-Inches	Tin
RVPX-P16PM1	Std Module	16	P1-P6 Power	50 Micro-Inches	Tin
RVPX-P08VM2	Std Module	8	P0 V- VITA 46	50 Micro-Inches	Tin-Lead
RVPX-P08DM2	Std Module	8	P0 Differential 10Gb/s	50 Micro-Inches	Tin-Lead
RVPX-P08SM2	Std Module	8	P0 Single-Ended	50 Micro-Inches	Tin-Lead
RVPX-P08PM2	Std Module	8	P0 Power	50 Micro-Inches	Tin-Lead
RVPX-P16DM2	Std Module	16	P1-P6 Differential 10Gb/s	50 Micro-Inches	Tin-Lead
RVPX-PE16DM2	Evolution Module	16	P1-P6 Differential 16Gb/s	50 Micro-Inches	Tin-Lead
RVPX-P16SM2	Std Module	16	P1-P6 Single-Ended	50 Micro-Inches	Tin-Lead
RVPX-P16PM2	Std Module	16	P1-P6 Power	50 Micro-Inches	Tin-Lead
RVPX-P08VC1	Std Module	8	P0 V- VITA 46	30 Micro-Inches	Tin
RVPX-P08DC1	Std Module	8	P0 Differential 10Gb/s	30 Micro-Inches	Tin
RVPX-P08SC1	Std Module	8	P0 Single-Ended	30 Micro-Inches	Tin
RVPX-P08PC1	Std Module	8	P0 Power	30 Micro-Inches	Tin
RVPX-P16DC1	Std Module	16	P1-P6 Differential 10Gb/s	30 Micro-Inches	Tin
RVPX-PE16DC1	Evolution Module	16	P1-P6 Differential 16Gb/s	30 Micro-Inches	Tin
RVPX-P16SC1	Std Module	16	P1-P6 Single-Ended	30 Micro-Inches	Tin
RVPX-P16PC1	Std Module	16	P1-P6 Power	30 Micro-Inches	Tin
RVPX-P08VC2	Std Module	8	P0 V- VITA 46	30 Micro-Inches	Tin-Lead
RVPX-P08DC2	Std Module	8	P0 Differential 10Gb/s	30 Micro-Inches	Tin-Lead
RVPX-P08SC2	Std Module	8	P0 Single-Ended	30 Micro-Inches	Tin-Lead
RVPX-P08PC2	Std Module	8	P0 Power	30 Micro-Inches	Tin-Lead
RVPX-P16DC2	Std Module	16	P1-P6 Differential 10Gb/s	30 Micro-Inches	Tin-Lead
RVPX-PE16DC2	Evolution Module	16	P1-P6 Differential 16Gb/s	30 Micro-Inches	Tin-Lead
RVPX-P16SC2	Std Module	16	P1-P6 Single-Ended	30 Micro-Inches	Tin-Lead
RVPX-P16PC2	Std Module	16	P1-P6 Power	30 Micro-Inches	Tin-Lead
RVPX-J08EM1	Backplane	8	J0 End	50 Micro-Inches	Tin
RVPX-J08EC1	Backplane	8	J0 End	30 Micro-Inches	Tin
RVPX-J08EM2	Backplane	8	J0 End	50 Micro-Inches	Tin-Lead
RVPX-J08EC2	Backplane	8	J0 End	30 Micro-Inches	Tin-Lead
RVPX-J16MM1	Backplane	16	J1, J3-J5 Middle	50 Micro-Inches	Tin
RVPX-J16MC1	Backplane	16	J1, J3-J5 Middle	30 Micro-Inches	Tin
RVPX-J16EM1	Backplane	16	J2, J6 End	50 Micro-Inches	Tin
RVPX-J16EC1	Backplane	16	J2, J6 End	30 Micro-Inches	Tin
RVPX-J16MM2	Backplane	16	J1, J3-J5 Middle	50 Micro-Inches	Tin-Lead
RVPX-J16MC2	Backplane	16	J1, J3-J5 Middle	30 Micro-Inches	Tin-Lead
RVPX-J16EM2	Backplane	16	J2, J6 End	50 Micro-Inches	Tin-Lead
RVPX-J16EC2	Backplane	16	J2, J6 End	30 Micro-Inches	Tin-Lead

# DAUGHTER CARD: How to Order

Complete steps 1-6 to create your part number

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



**STEP 1 :**

Connector Type	
R-VPX-	Rugged High Speed Board

**STEP 3 :**

Size	
08	8 Position Insert
16	16 Position Insert

**STEP 5 :**

Contact Plating	
M	50 Micro-Inches Gold
C	30 Micro-Inches Gold

**STEP 2 :**

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

**STEP 4 :**

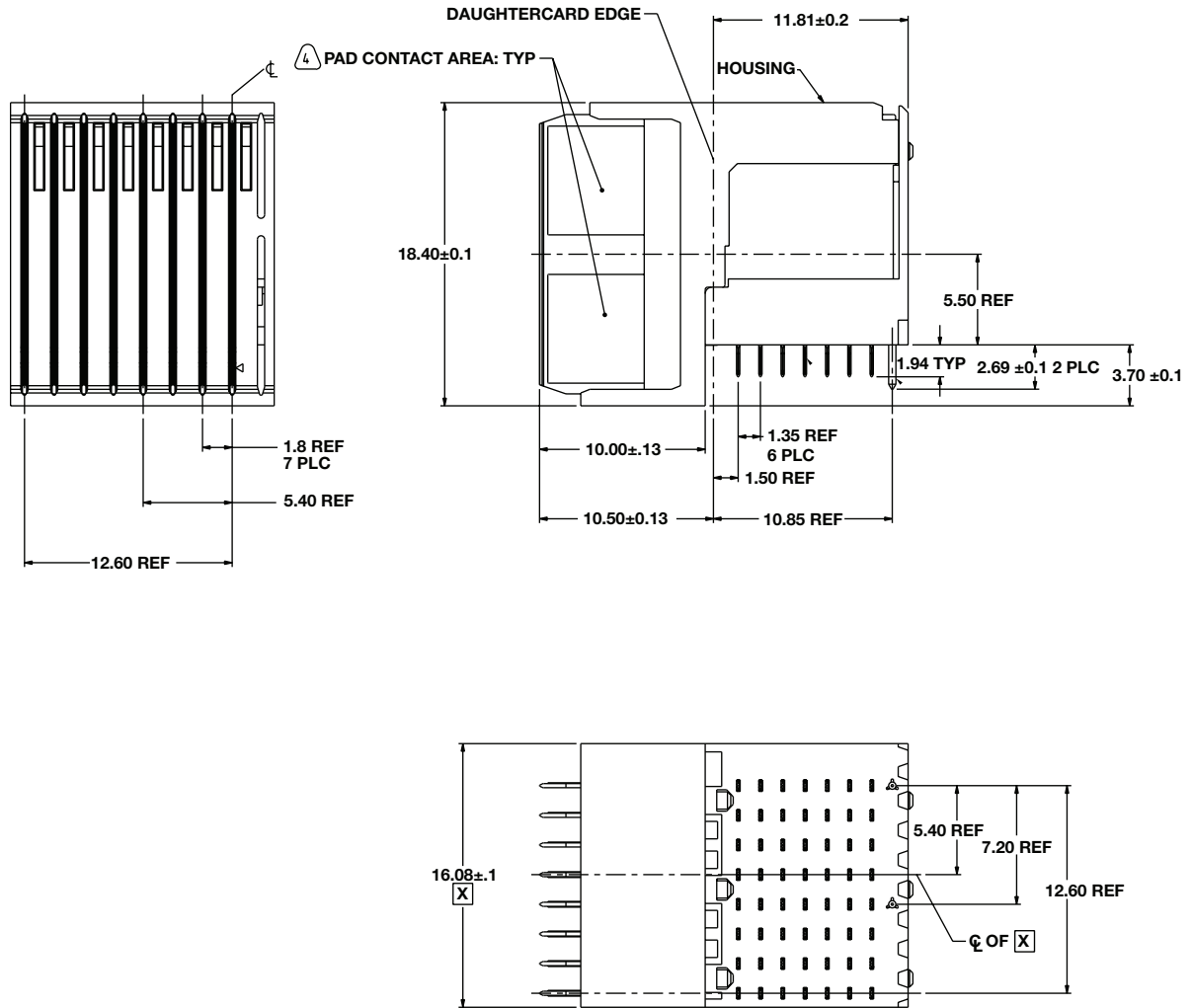
Insert Type	
D	Differential
S	Single-Ended
P	Power
V	Standard VITA 46 P0 Load

**STEP 6 :**

Contact Termination Finish		
1	Tin	
2	Tin-Lead	

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

# DAUGHTER CARD: 8 Position Half Left End Module

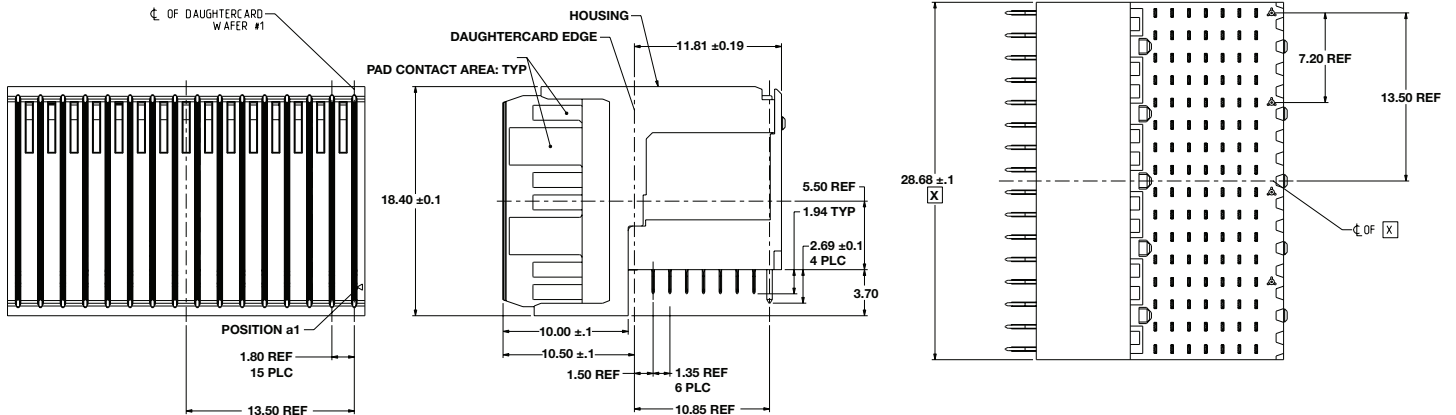


PLATING THICKNESS AND MATERIAL BY PART NUMBER

Part Number	Gold In Contact Area	Compliant Contact Termination Finish	Nickel Overall
RVPX-P08VM1	50 μ-Inch min.	Tin	50 μ-Inch Min.
RVPX-P08VM2		Tin-lead	
RVPX-P08VC1	30 μ-Inch min.	Tin	
RVPX-P08VC2		Tin-lead	

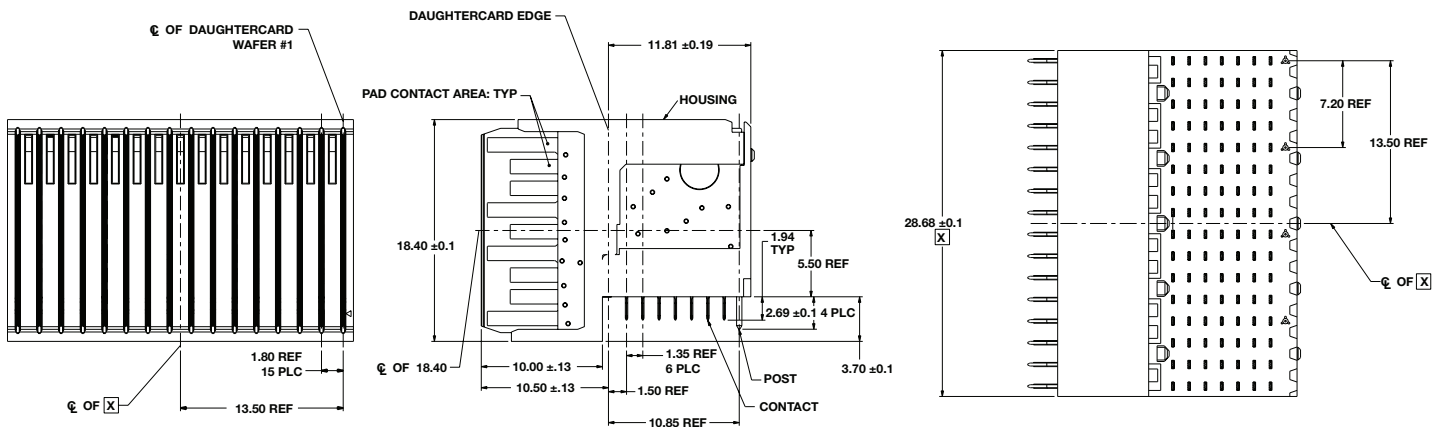


# DAUGHTER CARD: 16 Position Center Differential Module



PLATING THICKNESS AND MATERIAL BY PART NUMBER			
Part Number	Gold In Contact Area	Compliant Contact Termination Finish	Nickel Overall
RVPX-P16DM1	50 μ-Inch min.	Tin	50 μ-Inch Min.
RVPX-P16DM2		Tin-lead	
RVPX-P16DC1	30 μ-Inch min.	Tin	
RVPX-P16DC2		Tin-lead	

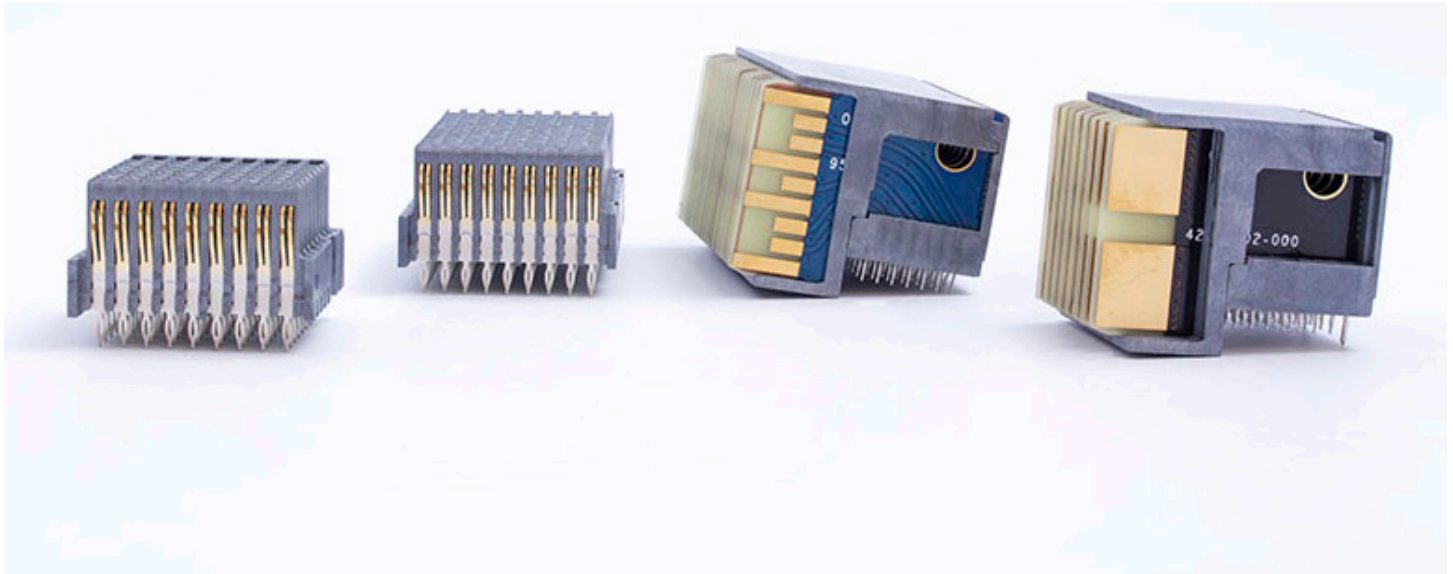
# DAUGHTER CARD: 16 Position Center Single End



PLATING THICKNESS AND MATERIAL BY PART NUMBER			
Part Number	Gold In Contact Area	Compliant Contact Termination Finish	Nickel Overall
RVPX-P16SM1	50 μ-Inch min.	Tin	50 μ-Inch Min.
RVPX-P16SM2		Tin-lead	
RVPX-P16SC1	30 μ-Inch min.	Tin	
RVPX-P16SC2		Tin-lead	

# R-VPX EVOLUTION SERIES

## HIGH SPEED EVOLUTION



### Amphenol introduces R-VPX Evolution Module capable of 16+Gbps data rate transfer performance.

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 for and ruggedized to handle harsh environment requirements in military applications across the board.

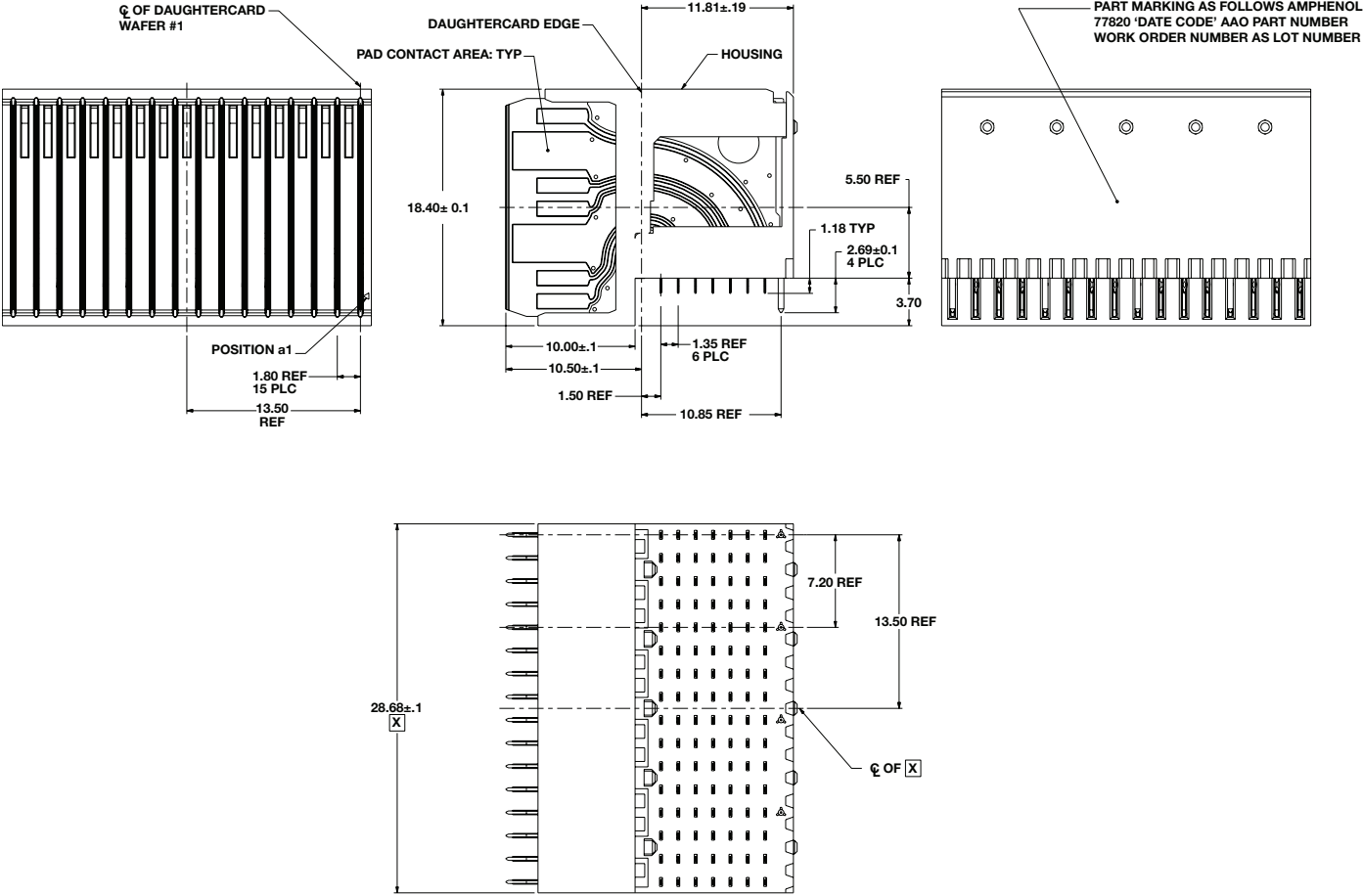
#### FEATURES AND BENEFITS

##### Supports High Speeded Protocols

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

# EVOLUTION SERIES- HIGH SPEED EVOLUTION

## DAUGHTER CARD: Right-Angle Plug Assembly, 16 Center

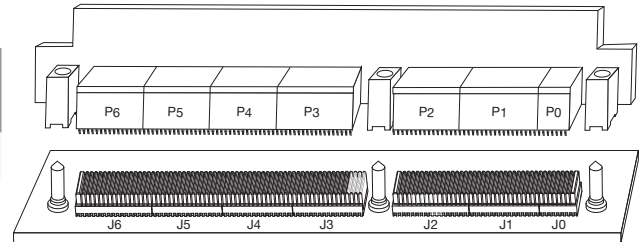


PLATING THICKNESS AND MATERIAL BY PART NUMBER			
Part Number	Gold In Contact Area	Compliant Contact Termination Finish	Nickel Overall
RVPX-PE16DM1	50 µ-Inch min.	Tin	50 µ-Inch Min.
RVPX-PE16DM2		Tin-lead	
RVPX-PE16DC1	30 µ-Inch min.	Tin	
RVPX-PE16DC2		Tin-lead	

# BACKPLANE: How to Order

Complete steps 1-6 to create your part number

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



## STEP 1 :

Connector Type
RVPX- Rugged High Speed Board

## STEP 2 :

Gender
J Backplane

## STEP 3 :

Size
08 8 Position Insert
16 16 Position Insert

## STEP 4 :

Insert Type
M Middle (NA for Size 08)
E End

## STEP 5 :

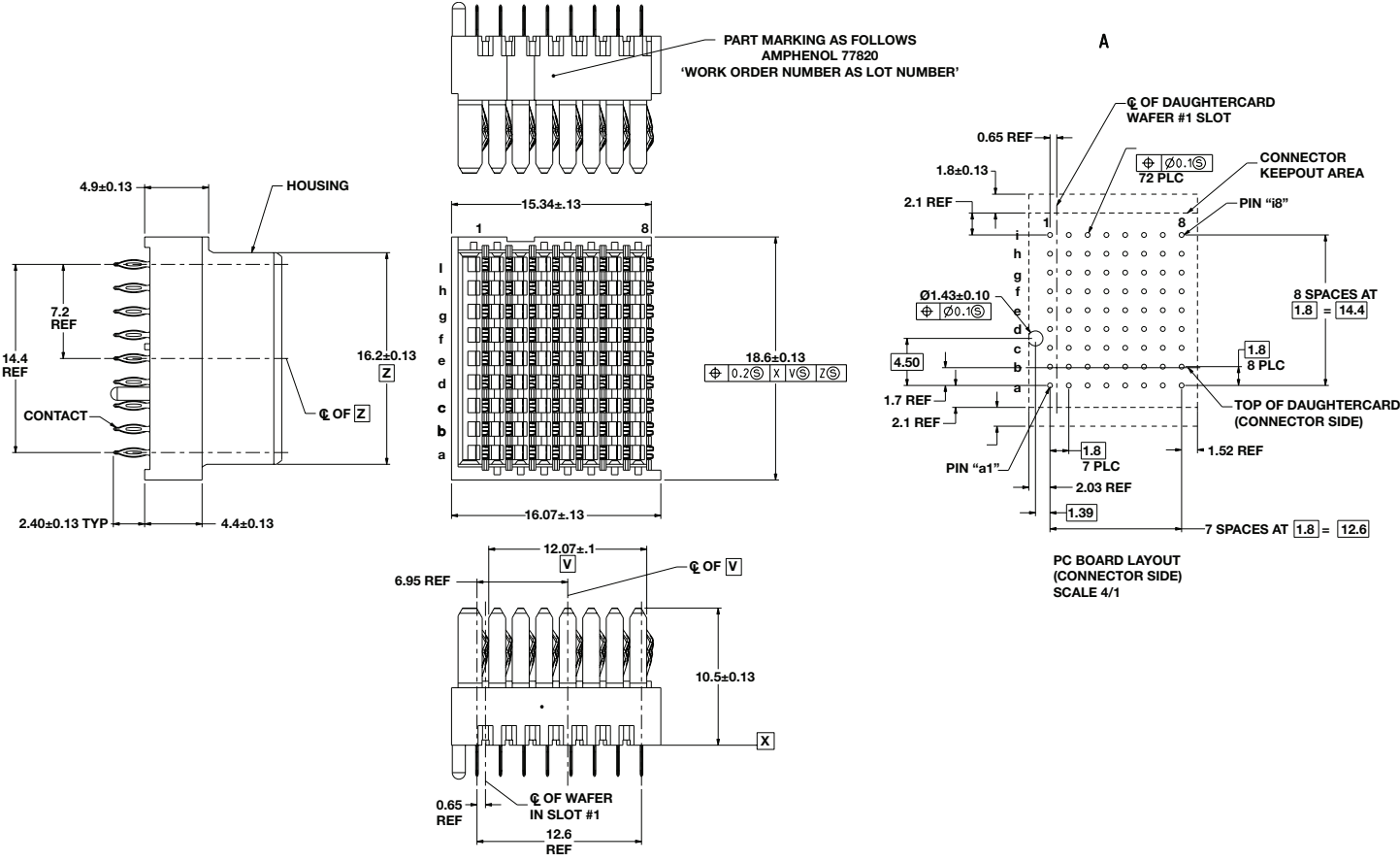
Contact Plating
M 50 Micro-Inches Gold
C 30 Micro-Inches Gold

## STEP 6 :

Contact Termination Finish
1 Tin
2 Tin-Lead

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-HPD-X	RVPX-HPM-X

# BACKPLANE: 8 Position Left End Backplane

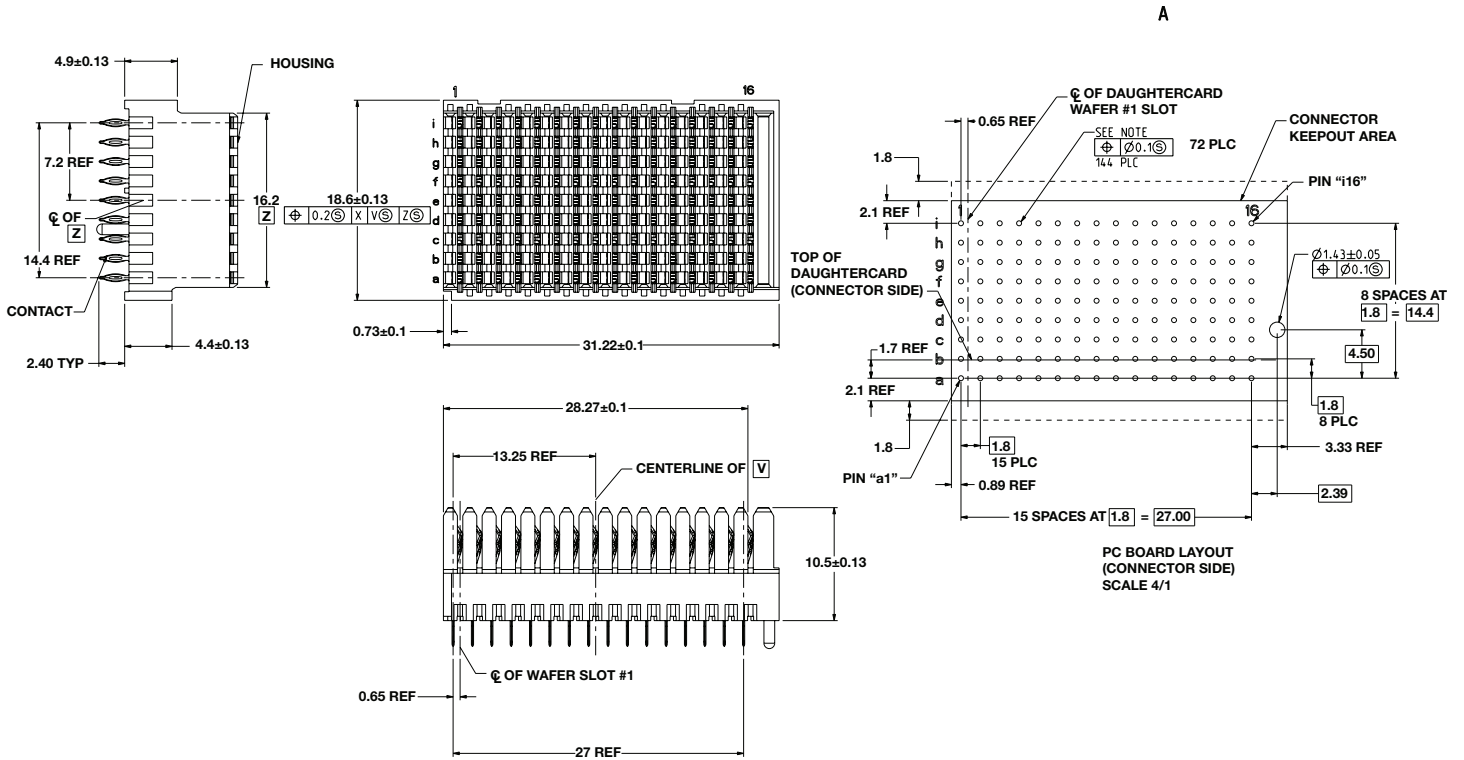


PLATING THICKNESS AND MATERIAL BY PART NUMBER			
Part Number	Gold In Contact Area	Compliant Contact Termination Finish	Nickel Overall
RVPX-J08EM1	50 µ-Inch min.	Tin	50 µ-Inch Min.
RVPX-J08EM2		Tin-lead	
RVPX-J08EC1	30 µ-Inch min.	Tin	
RVPX-J08EC2		Tin-lead	





# BACKPLANE: 16 Position Right End Backplane



PLATING THICKNESS AND MATERIAL BY PART NUMBER

Part Number	Gold In Contact Area	Compliant Contact Termination Finish	Nickel Overall
RVPX-J16EM1	50 µ-Inch min.	Tin	50 µ-Inch Min.
RVPX-J16EM2		Tin-lead	
RVPX-J16EC1	30 µ-Inch min.	Tin	
RVPX-J16EC2		Tin-lead	

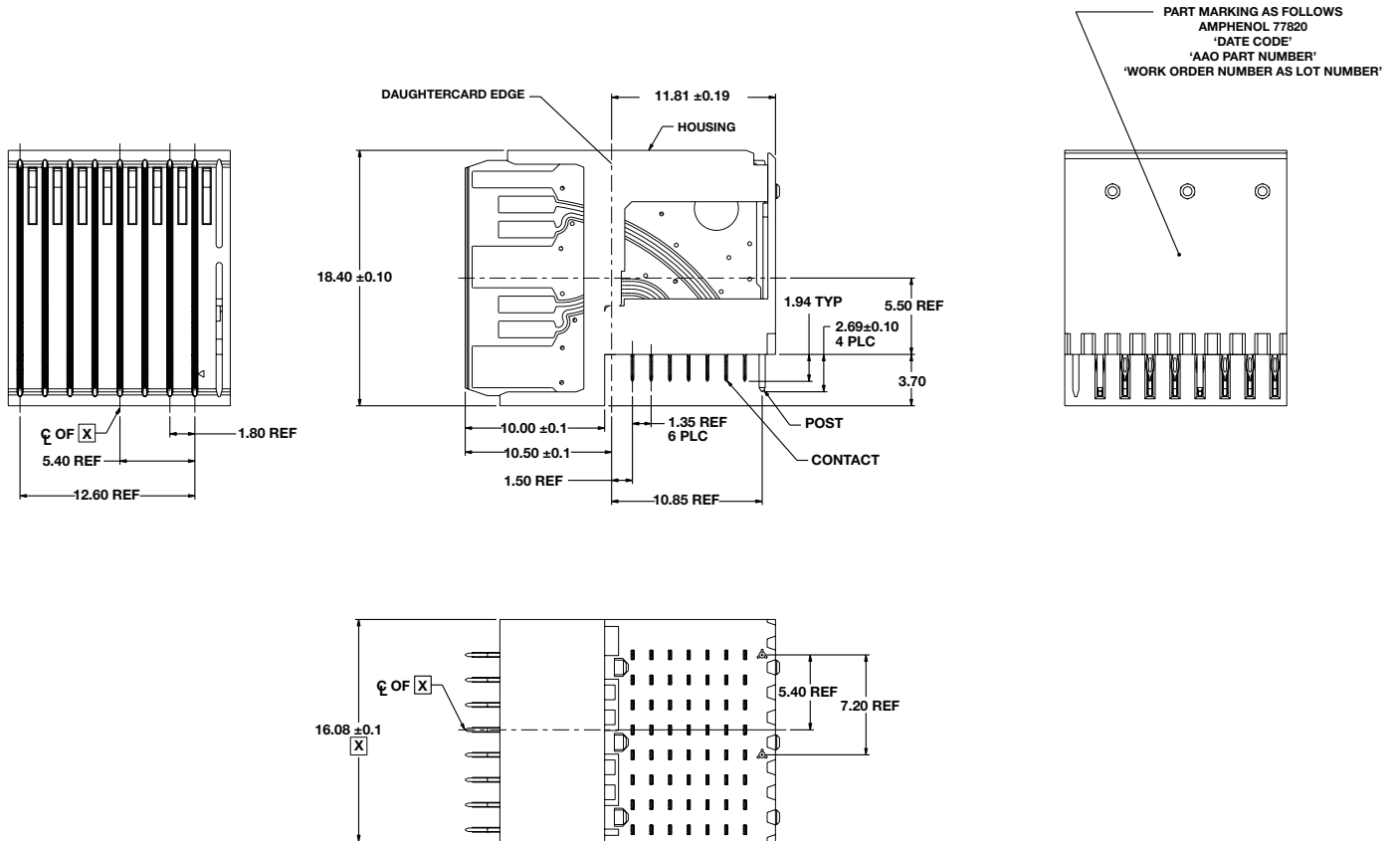
## R-VPX REAR TRANSITION MODULE Part Number List:

Part Number	Gender	Size	Insert Type	Plating	Contact Finish
RVPX-RP016VC1	RTM Module	16	End - RP0	30 Micro-Inches	Tin
RVPX-RP016VC2	RTM Module	16	End - RP0	30 Micro-Inches	Tin-Lead
RVPX-RP016VM1	RTM Module	16	End - RP0	50 Micro-Inches	Tin
RVPX-RP016VM2	RTM Module	16	End - RP0	50 Micro-Inches	Tin-Lead
RVPX-RP116DC1	RTM Module	16	RP1 Differential	30 Micro-Inches	Tin
RVPX-RP116DC2	RTM Module	16	RP1 Differential	30 Micro-Inches	Tin-Lead
RVPX-RP116DM1	RTM Module	16	RP1 Differential	50 Micro-Inches	Tin
RVPX-RP116DM2	RTM Module	16	RP1 Differential	50 Micro-Inches	Tin-Lead
RVPX-RP116DSC1	RTM Module	16	RP1 Differential & Single-Ended	30 Micro-Inches	Tin
RVPX-RP116DSC2	RTM Module	16	RP1 Differential & Single-Ended	30 Micro-Inches	Tin-Lead
RVPX-RP116DSM1	RTM Module	16	RP1 Differential & Single-Ended	50 Micro-Inches	Tin
RVPX-RP116DSM2	RTM Module	16	RP1 Differential & Single-Ended	50 Micro-Inches	Tin-Lead
RVPX-RP208DC1	RTM Module	8	RP2 Single-Ended	30 Micro-Inches	Tin
RVPX-RP208DC2	RTM Module	8	RP2 Single-Ended	30 Micro-Inches	Tin-Lead
RVPX-RP208DM1	RTM Module	8	RP2 Differential	50 Micro-Inches	Tin
RVPX-RP208DM2	RTM Module	8	RP2 Differential	50 Micro-Inches	Tin-Lead
RVPX-RP208SM1	RTM Module	8	RP2 Differential	50 Micro-Inches	Tin
RVPX-RP208SM2	RTM Module	8	RP2 Differential	50 Micro-Inches	Tin-Lead
RVPX-RP208SC1	RTM Module	8	RP2 Differential	30 Micro-Inches	Tin
RVPX-RP208SC2	RTM Module	8	RP2 Differential	30 Micro-Inches	Tin-Lead
RVPX-RP116DC1	RTM Module	16	RP3-RP6 Differential	30 Micro-Inches	Tin
RVPX-RP116DC2	RTM Module	16	RP3-RP6 Differential	30 Micro-Inches	Tin-Lead
RVPX-RP116DM1	RTM Module	16	RP3-RP6 Differential	50 Micro-Inches	Tin
RVPX-RP116DM2	RTM Module	16	RP3-RP6 Differential	50 Micro-Inches	Tin-Lead
RVPX-P16SC1	RTM Module	16	RP3-RP6 Single Ended	30 Micro-Inches	Tin
RVPX-P16SC2	RTM Module	16	RP3-RP6 Single Ended	30 Micro-Inches	Tin-Lead
RVPX-P16SM1	RTM Module	16	RP3-RP6 Single Ended	50 Micro-Inches	Tin
RVPX-P16SM2	RTM Module	16	RP3-RP6 Single Ended	50 Micro-Inches	Tin-Lead
RVPX-RJ0116MC1	RTM Backplane	16	RJ0 15 Columns of contacts	30 Micro-Inches	Tin
RVPX-RJ0116MC2	RTM Backplane	16	RJ0 15 Columns of contacts	30 Micro-Inches	Tin-Lead
RVPX-RJ0116MM1	RTM Backplane	16	RJ0 15 Columns of contacts	50 Micro-Inches	Tin
RVPX-RJ0116MM2	RTM Backplane	16	RJ0 15 Columns of contacts	50 Micro-Inches	Tin-Lead
RVPX-RJ0216MC1	RTM Backplane	16	RJ0 7 Columns of contacts	30 Micro-Inches	Tin
RVPX-RJ0216MC2	RTM Backplane	16	RJ0 7 Columns of contacts	30 Micro-Inches	Tin-Lead
RVPX-RJ0216MM1	RTM Backplane	16	RJ0 7 Columns of contacts	50 Micro-Inches	Tin
RVPX-RJ0216MM2	RTM Backplane	16	RJ0 7 Columns of contacts	50 Micro-Inches	Tin-Lead
RVPX-J16MC1	RTM Backplane	16	RJ1 16 Columns of contacts	30 Micro-Inches	Tin
RVPX-J16MC2	RTM Backplane	16	RJ1 16 Columns of contacts	30 Micro-Inches	Tin-Lead
RVPX-J16MM1	RTM Backplane	16	RJ1 16 Columns of contacts	50 Micro-Inches	Tin
RVPX-J16MM2	RTM Backplane	16	RJ1 16 Columns of contacts	50 Micro-Inches	Tin-Lead

## R-VPX REAR TRANSITION MODULE Part Number List:

Part Number	Gender	Size	Insert Type	Plating	Contact Finish
RVPX-RJ1216MC1	RTM Backplane	16	RJ1 8 Columns of contacts	30 Micro-Inches	Tin
RVPX-RJ1216MC2	RTM Backplane	16	RJ1 8 Columns of contacts	30 Micro-Inches	Tin-Lead
RVPX-RJ1216MM1	RTM Backplane	16	RJ1 8 Columns of contacts	50 Micro-Inches	Tin
RVPX-RJ1216MM2	RTM Backplane	16	RJ1 8 Columns of contacts	50 Micro-Inches	Tin-Lead
RVPX-J08EC1	RTM Backplane	8	RJ2 End	30 Micro-Inches	Tin
RVPX-J08EC2	RTM Backplane	8	RJ2 End	30 Micro-Inches	Tin-Lead
RVPX-J08EM1	RTM Backplane	8	RJ2 End	50 Micro-Inches	Tin
RVPX-J08EM2	RTM Backplane	8	RJ2 End	50 Micro-Inches	Tin-Lead
RVPX-J16EC1	RTM Backplane	16	RJ3 End	30 Micro-Inches	Tin
RVPX-J16EC2	RTM Backplane	16	RJ3 End	30 Micro-Inches	Tin-Lead
RVPX-J16EM1	RTM Backplane	16	RJ3 End	50 Micro-Inches	Tin
RVPX-J16EM2	RTM Backplane	16	RJ3 End	50 Micro-Inches	Tin-Lead
RVPX-J16MC1	RTM Backplane	16	RJ4-RJ6	30 Micro-Inches	Tin
RVPX-J16MC2	RTM Backplane	16	RJ4-RJ6	30 Micro-Inches	Tin-Lead
RVPX-J16MM1	RTM Backplane	16	RJ4-RJ6	50 Micro-Inches	Tin
RVPX-J16MM2	RTM Backplane	16	RJ4-RJ6	50 Micro-Inches	Tin-Lead

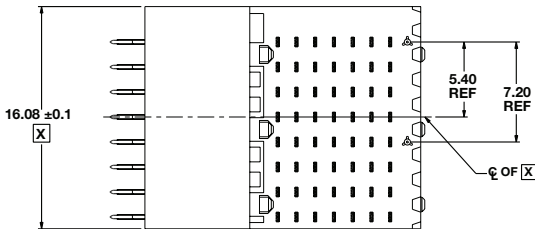
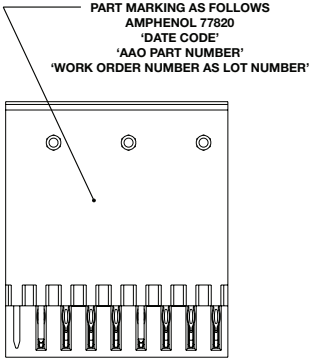
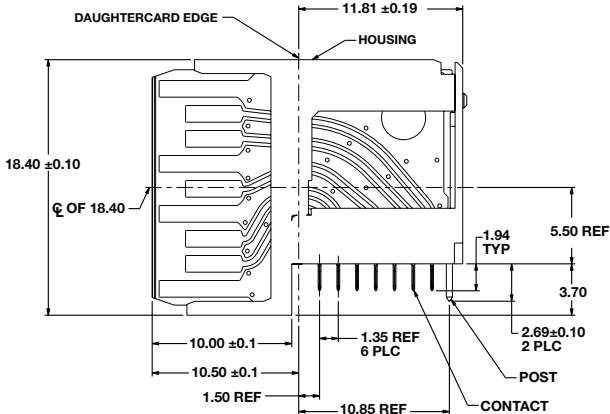
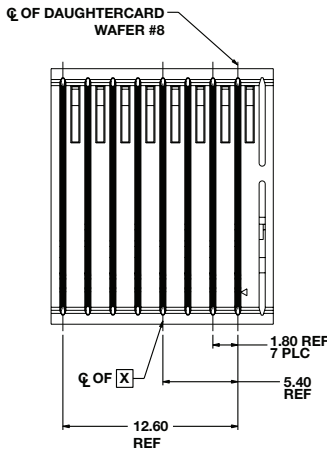
# REAR TRANSITION MODULE: Right Angle Plug Assembly, Half Left End, Daughtercard Differential



PLATING THICKNESS AND MATERIAL BY PART NUMBER			
Part Number	Gold In Contact Area	Compliant Contact Termination Finish	Nickel Overall
RVPX-RP208DM1	50 μ-Inch min.	Tin	50 μ-Inch Min.
RVPX-RP208DM2		Tin-lead	
RVPX-RP208DC2	30 μ-Inch min.	Tin	
RVPX-RP208DC2		Tin-lead	



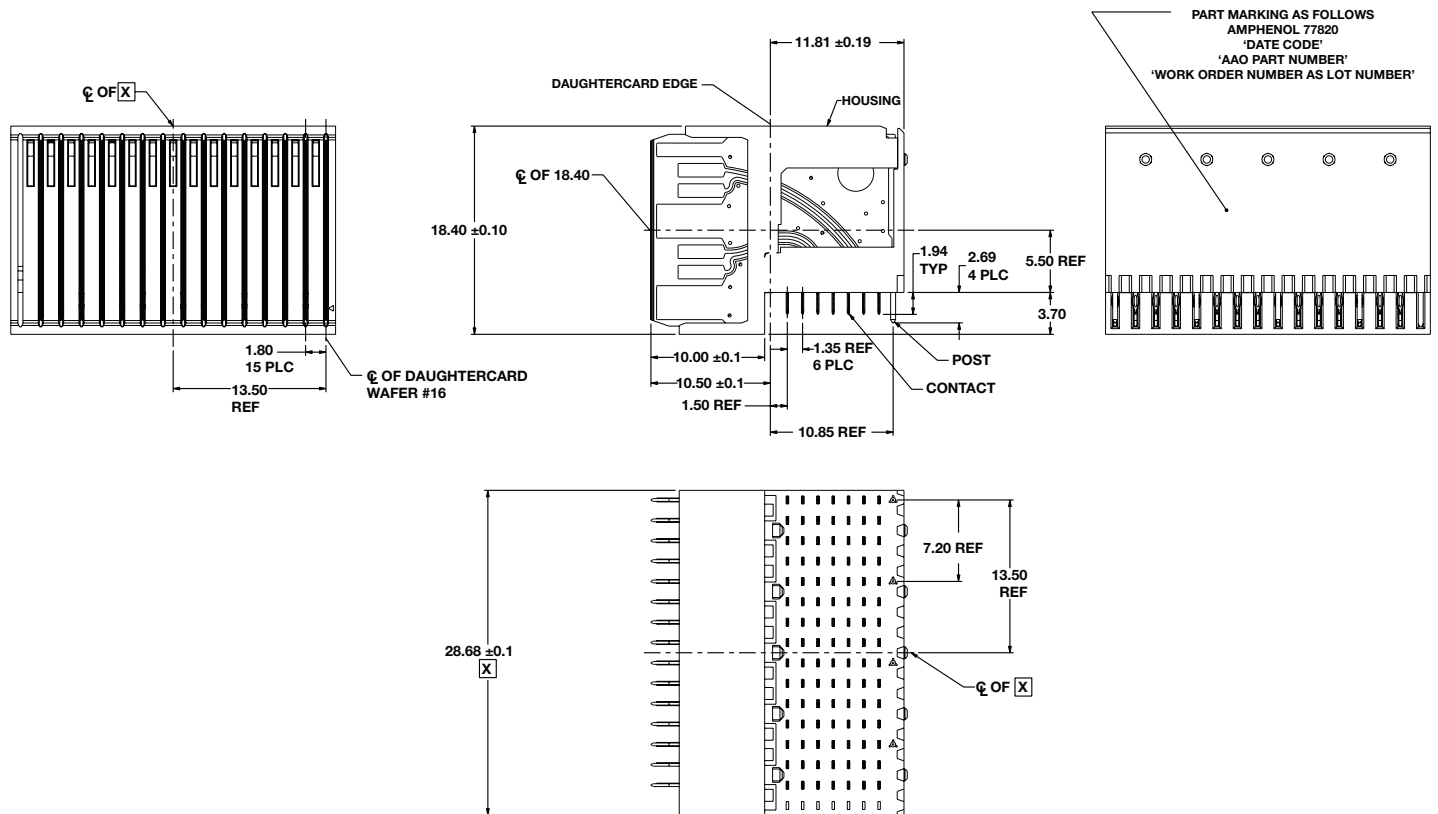
# REAR TRANSITION MODULE: Right Angle Plug Assembly, Center RVPX Daughtercard Differential



PLATING THICKNESS AND MATERIAL BY PART NUMBER

Part Number	Gold In Contact Area	Compliant Contact Termination Finish	Nickel Overall
RVPX-RP208SM1	50 μ-Inch min.	Tin	50 μ-Inch Min.
RVPX-RP208SM2		Tin-lead	
RVPX-RP208SC1	30 μ-Inch min.	Tin	
RVPX-RP208SC2		Tin-lead	

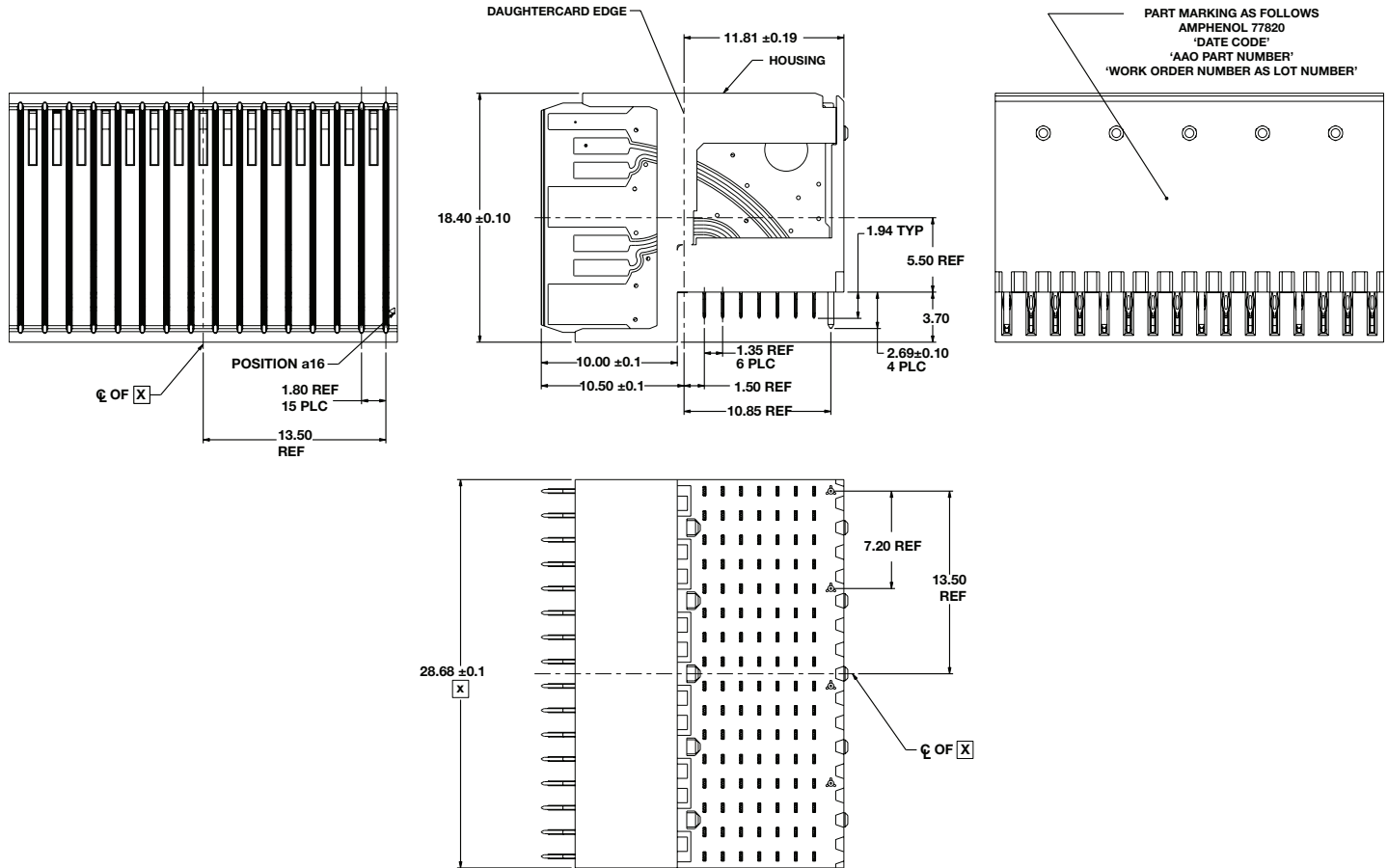
# REAR TRANSITION MODULE: Right Angle Plug Assembly, Center RVPX Daughtercard



PLATING THICKNESS AND MATERIAL BY PART NUMBER

Part Number	Gold In Contact Area	Compliant Contact Termination Finish	Nickel Overall
RVPX-RP016VM1	50 µ-Inch min.	Tin	50 µ-Inch Min.
RVPX-RP016VM2		Tin-lead	
RVPX-RP016VC1	30 µ-Inch min.	Tin	
RVPX-RP016VC2		Tin-lead	

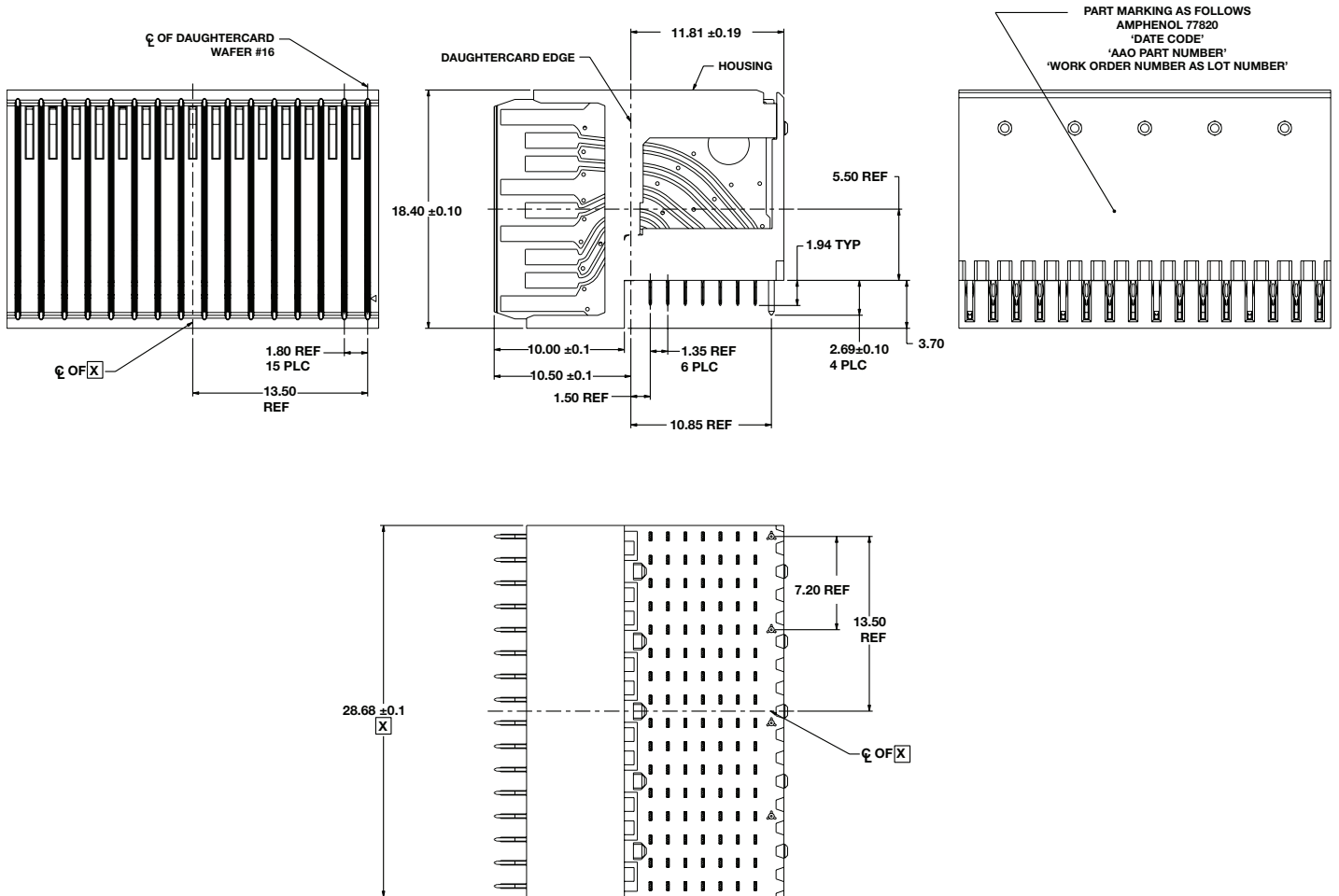
# REAR TRANSITION MODULE: Right Angle Plug Assembly, Center RVPX Daughtercard Differential



PLATING THICKNESS AND MATERIAL BY PART NUMBER

Part Number	Gold In Contact Area	Compliant Contact Termination Finish	Nickel Overall
RVPX-RP116DM1	50 μ-Inch min.	Tin	50 μ-Inch Min.
RVPX-RP116DM2		Tin-lead	
RVPX-RP116DC1	30 μ-Inch min.	Tin	
RVPX-RP116DC2		Tin-lead	

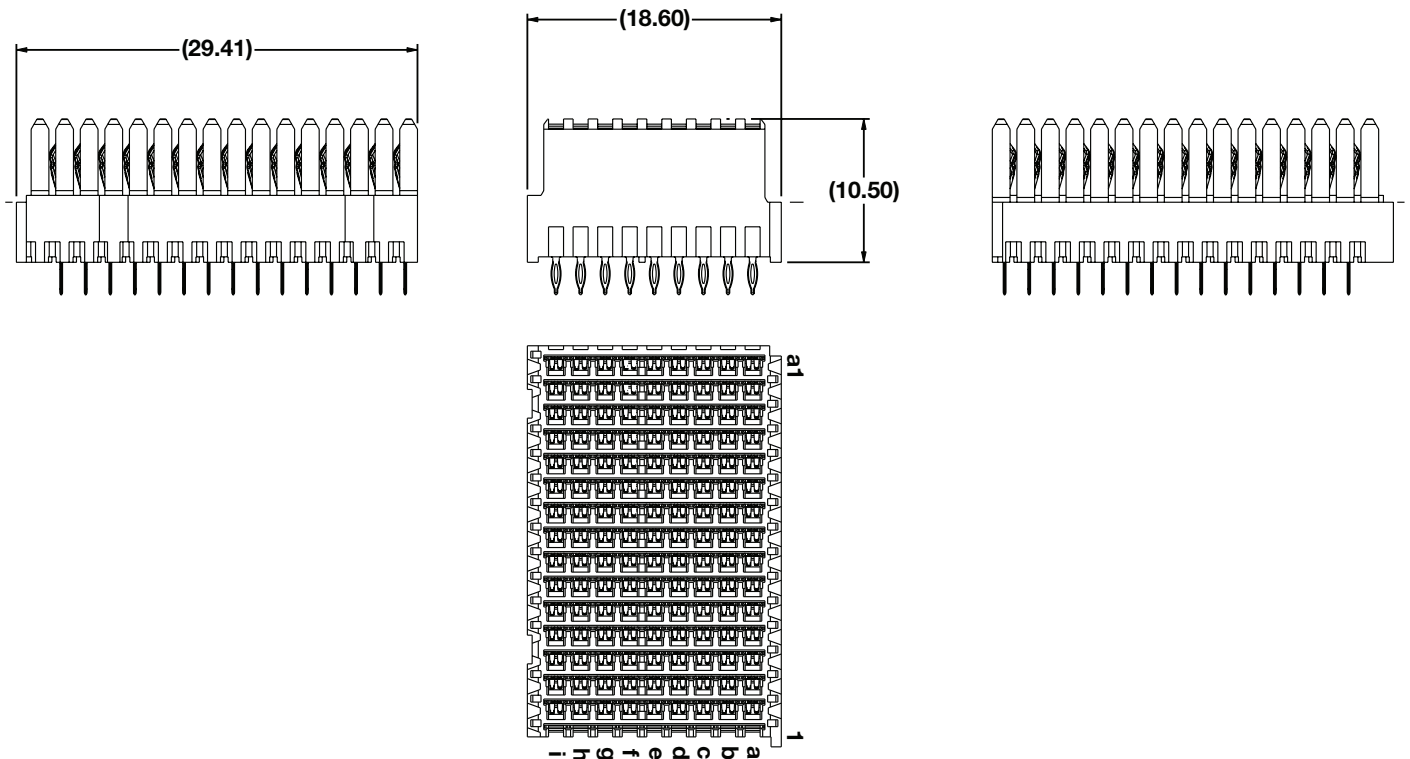
# REAR TRANSITION MODULE: Right Angle Plug Assembly, Center RVPX Daughtercard Differential-SE



PLATING THICKNESS AND MATERIAL BY PART NUMBER

Part Number	Gold In Contact Area	Compliant Contact Termination Finish	Nickel Overall
RVPX-RP116DSM1	50 µ-Inch min.	Tin	50 µ-Inch Min.
RVPX-RP116DSM2		Tin-lead	
RVPX-RP116DSC1	30 µ-Inch min.	Tin	
RVPX-RP116DSC2		Tin-lead	

# BACKPLANE: Rear Transition Module Center

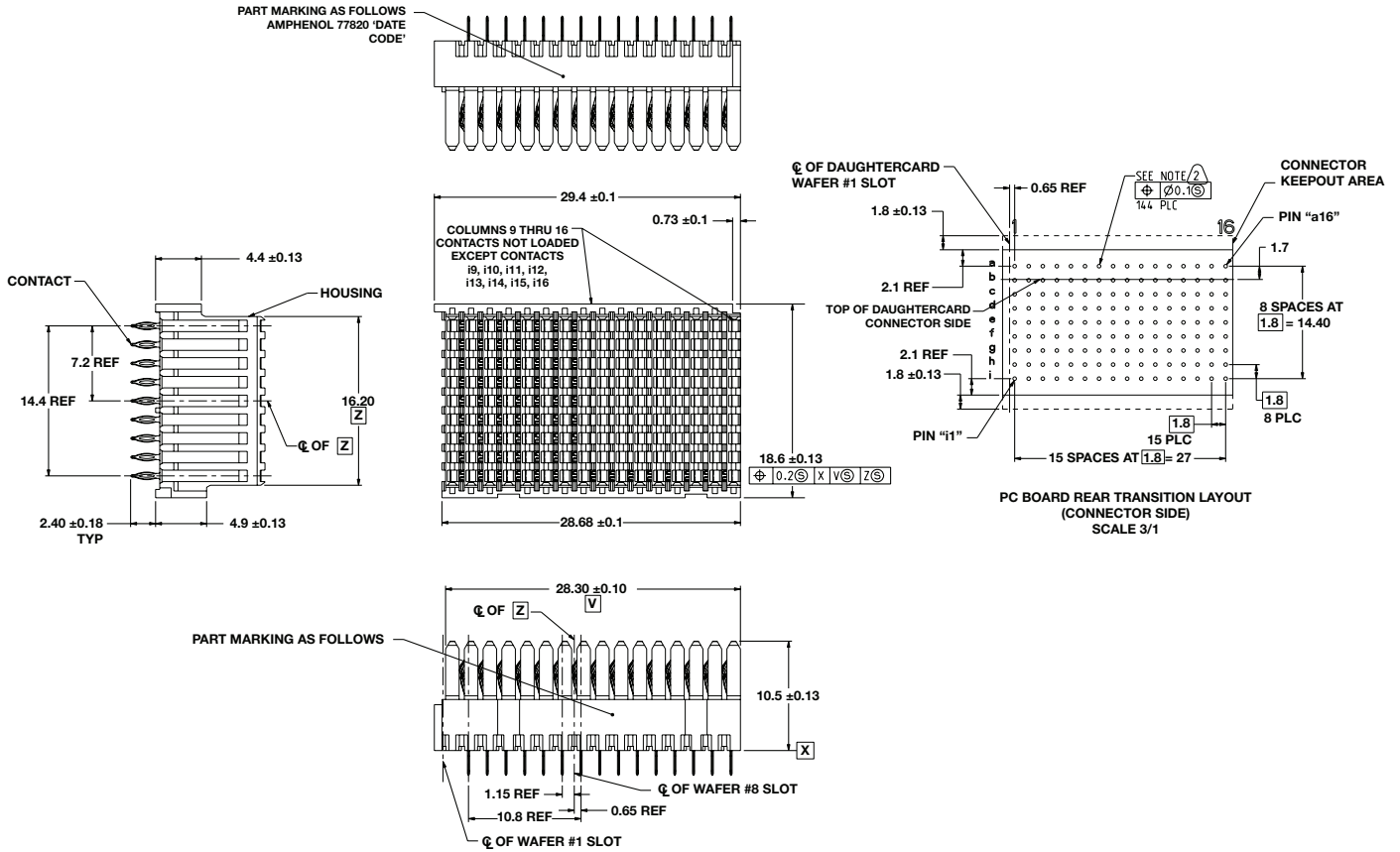


PLATING THICKNESS AND MATERIAL BY PART NUMBER

Part Number	Gold In Contact Area	Compliant Contact Termination Finish	Nickel Overall
RVPX-RJ0116MM1M	50 $\mu$ -Inch min.	Tin	50 $\mu$ -Inch Min.
RVPX-RJ0116MM2M		Tin-lead	
RVPX-RJ0116MC1M	30 $\mu$ -Inch min.	Tin	
RVPX-RJ0116MC2M		Tin-lead	

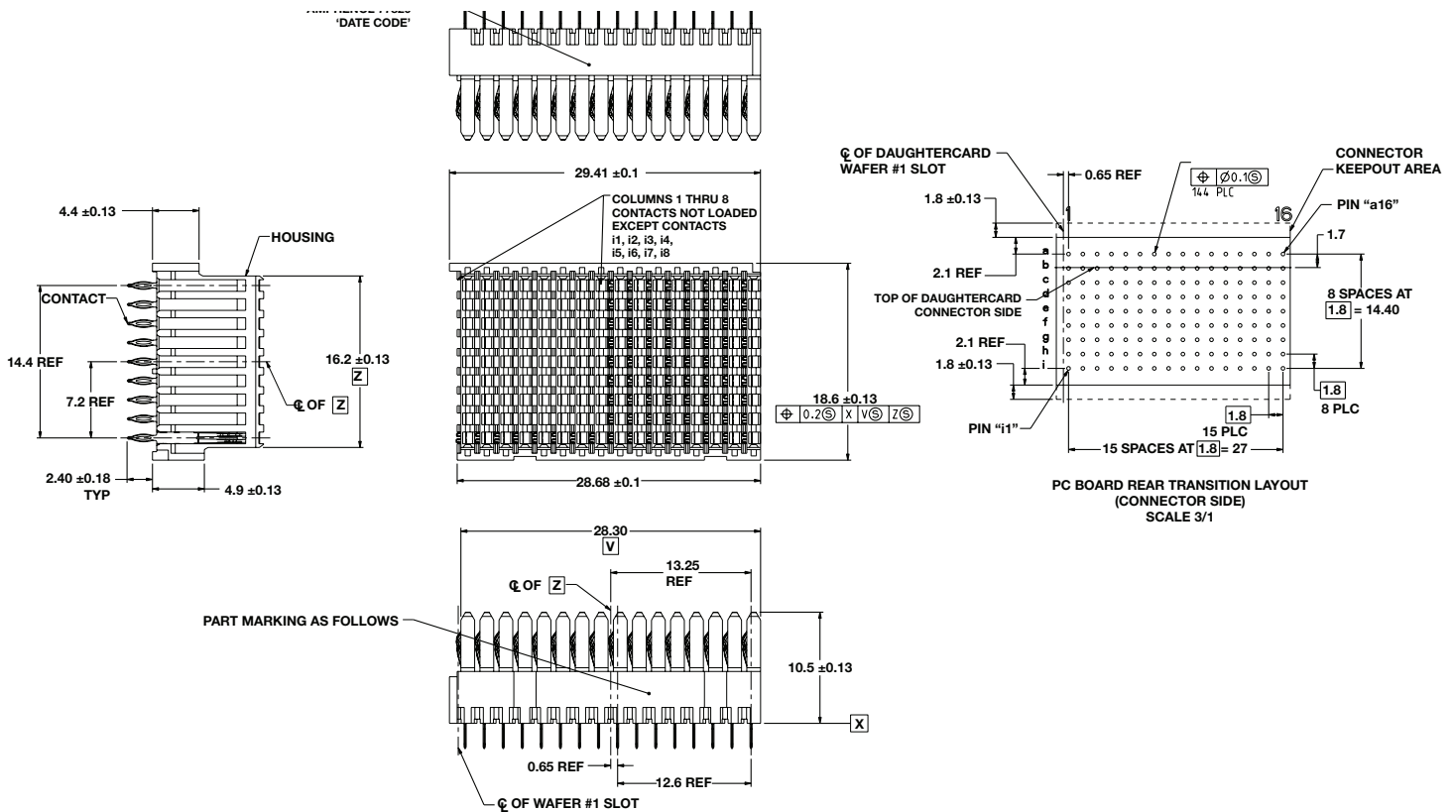


# BACKPLANE: Rear Transition Module Vertical Receptacle Center, Partial Load



PLATING THICKNESS AND MATERIAL BY PART NUMBER			
Part Number	Gold In Contact Area	Compliant Contact Termination Finish	Nickel Overall
RVPX-RJ0216MM1	50 μ-Inch min.	Tin	50 μ-Inch Min.
RVPX-RJ0216MM2		Tin-lead	
RVPX-RJ0216MC1	30 μ-Inch min.	Tin	
RVPX-RJ0216MC2		Tin-lead	

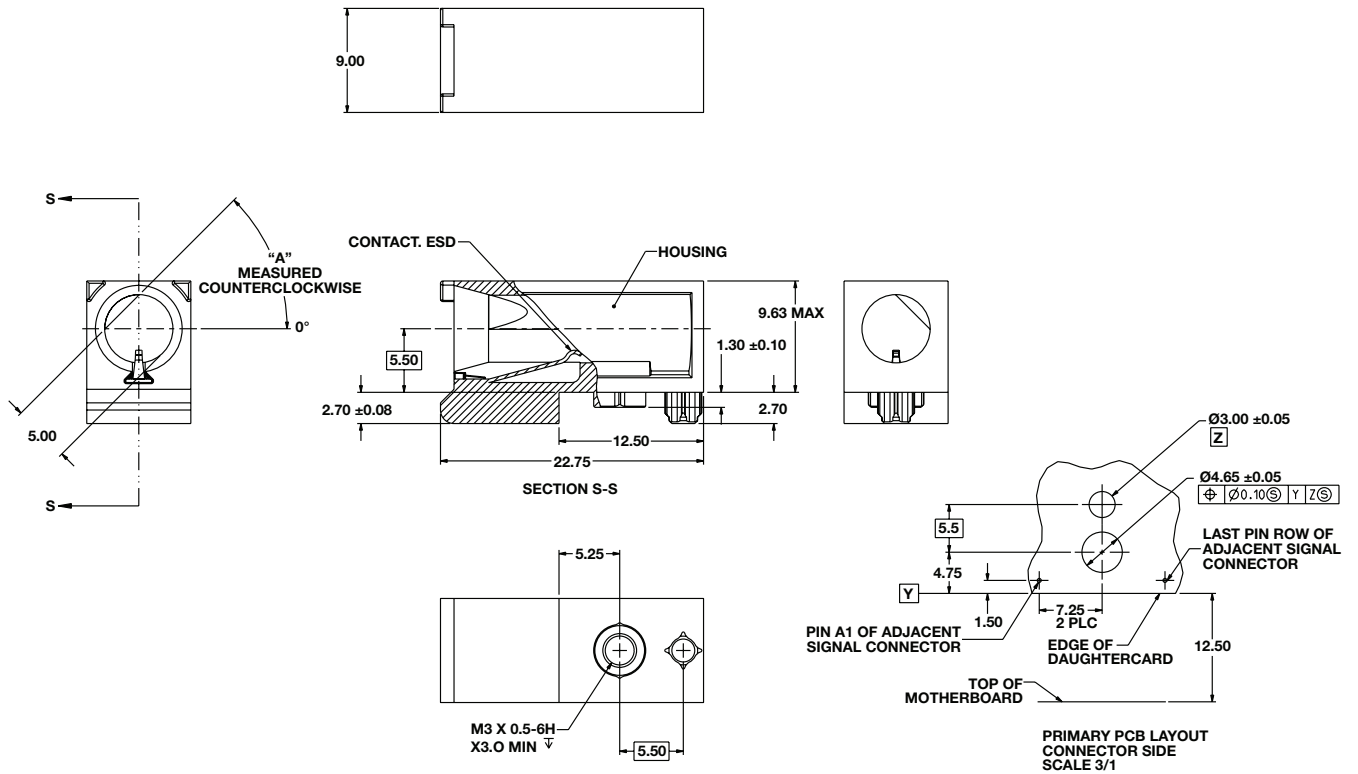
# BACKPLANE: Rear Transition Module Vertical Receptacle Center, Partial Load



## PLATING THICKNESS AND MATERIAL BY PART NUMBER

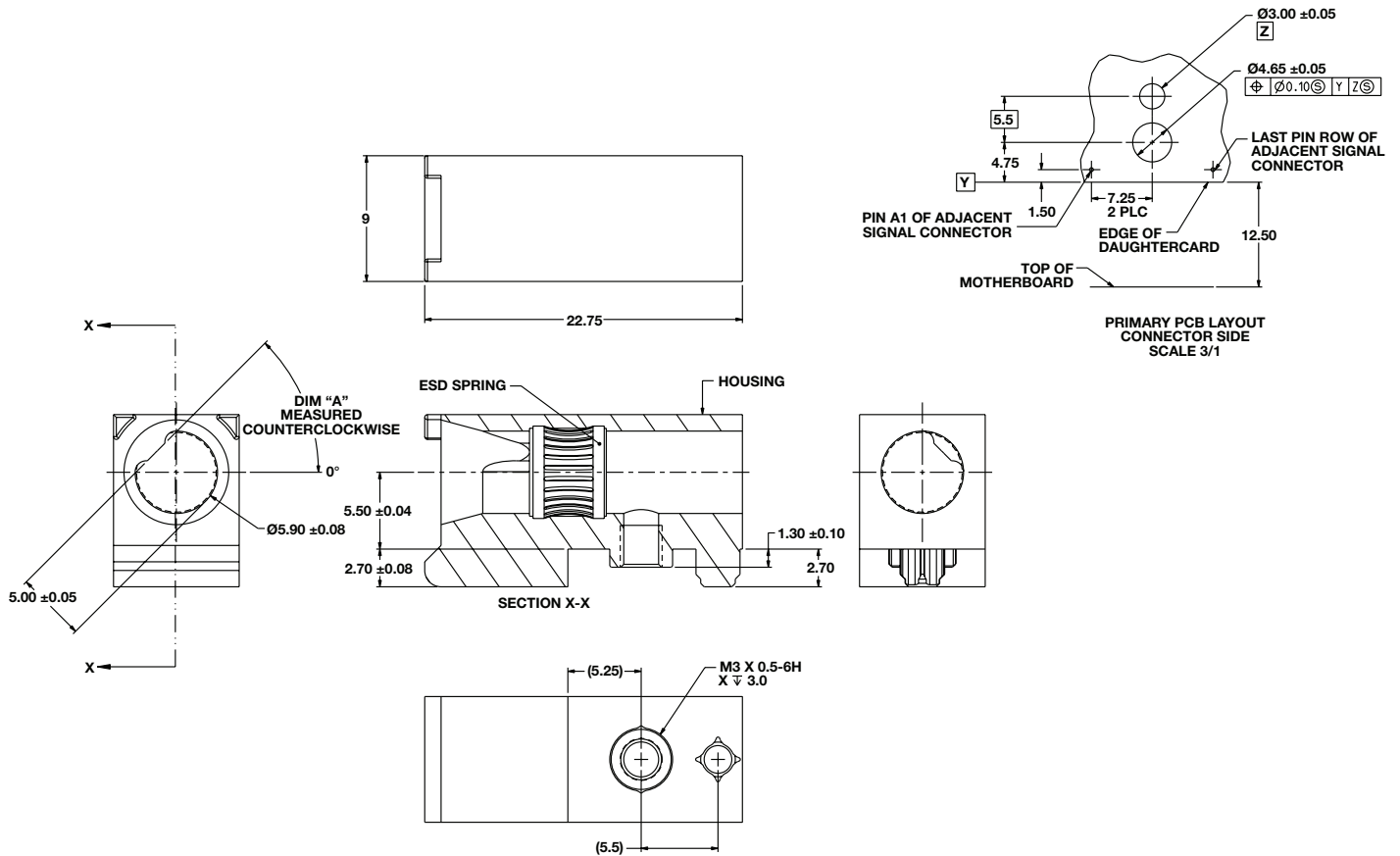
Part Number	Gold In Contact Area	Compliant Contact Termination Finish	Nickel Overall
RVPX-RJ1216MM1	50 μ-Inch min.	Tin	50 μ-Inch Min.
RVPX-RJ1216MM2		Tin-lead	
RVPX-RJ1216MC1	30 μ-Inch min.	Tin	
RVPX-RJ1216MC2		Tin-lead	

# HARDWARE: Zinc Die Cast Guide Modules



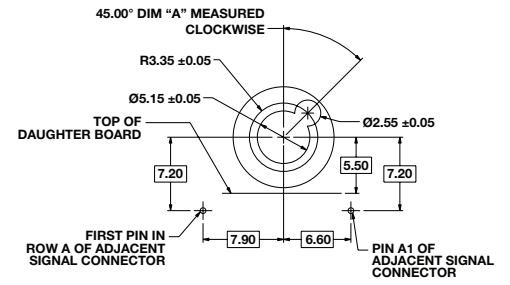
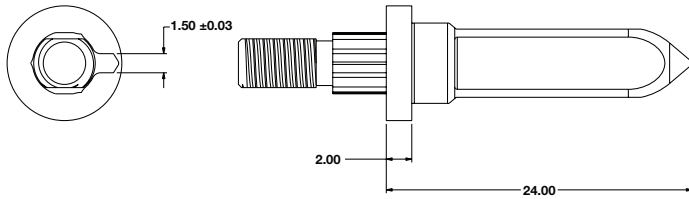
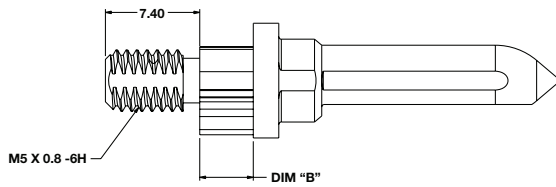
ZINC DIE CAST GUIDE MODULES	
Part Number	DIM. A
RVPX-HMD-1	0
RVPX-HMD-2	45
RVPX-HMD-3	90
RVPX-HMD-7	270
RVPX-HMD-8	315
RVPX-HMD-9	No Key

# HARDWARE: Machined Aluminum Guide Modules



MACHINED ALUMINUM GUIDE MODULES	
Part Number	DIM. A
RVPX-HMM-1	0
RVPX-HMM-2	45
RVPX-HMM-3	90
RVPX-HMM-4	270
RVPX-HMM-5	315
RVPX-HMM-6	8
RVPX-HMM-7	0
RVPX-HMM-8	45
RVPX-HMM-9	90
RVPX-HMM-10	270
RVPX-HMM-12	315
RVPX-HMM-13	8

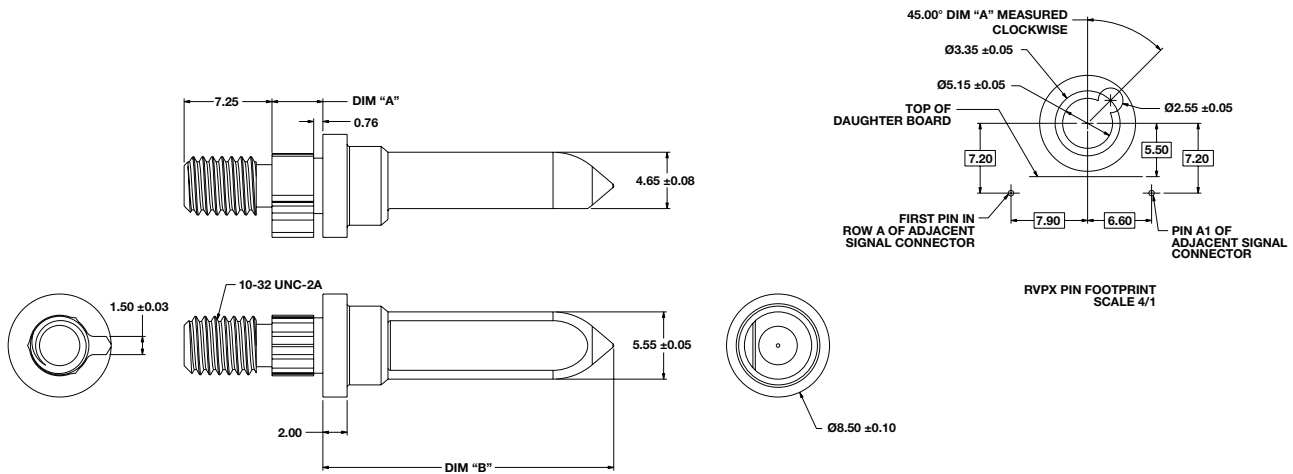
# HARDWARE: Zinc Die Cast Guide Pins



RVPX PIN FOOTPRINT  
SCALE 4/1

ZINC DIE CAST GUIDE PINS	
Part Number	DIM. B
RVPX-HPD-2	2.60
RVPX-HPD-3	4.20
RVPX-HPD-4	5.70

# HARDWARE: Machined Stainless Steel Guide Pins



MACHINED STAINLESS STEEL GUIDE PINS		
Part Number	DIM. A	DIM. B
RVPX-HPM-1	1.32	24.0
RVPX-HPM-2	2.60	24.0
RVPX-HPM-3	4.20	24.0
RVPX-HPM-4	5.70	24.0
RVPX-HPM-5	7.30	24.0
RVPX-HPM-10	1.32	19.0
RVPX-HPM-12	4.20	19.0
RVPX-HPM-13	5.70	19.0

# TOOLS: Backplane Connector Removal

## BACKPLANE CONNECTOR REMOVAL

Amphenol has a two step process for backplane removal. First the backplane housing is removed using tool 640-0003-000 or 640-0001-000 for 8 and 16 position housings respectively.

The tool is placed around the housing with the fingers interlocking the base of the housing you would like to remove. Then the screw is turned until the housing comes off its contacts.

Second tool 640-0002-000 is used to remove the contacts. Gently place the comb under the last row of contacts and rock it back until the contacts come out of their holes. Repeat until all rows are removed.



ORDER GUIDE	
PART NUMBER	DESCRIPTION
640-0001-000	8 Position Connector Removal Tool
640-0003-000	16 Position Connector Removal Tool
640-0002-000	Contact Removal Comb Tool

## INSTALLATION:

The RVPX connector is design for simple installation. A Mechanical electric press or Arbor Press is used to compress the compliants into the plated thru holes seating the connector. Care should be taken to ensure even distribution of force across the housings. This can easily be achieved with the use of flat rock tooling.

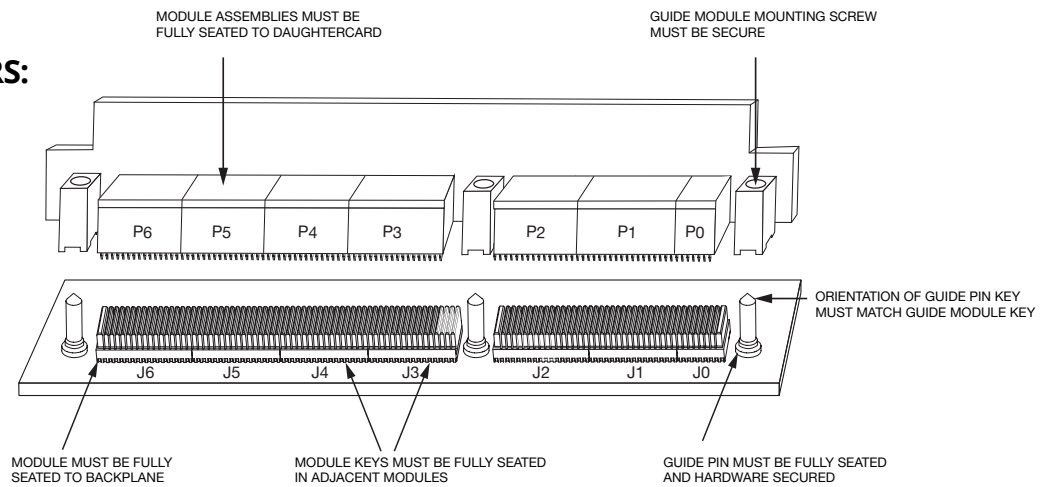
When pressing the module assemblies the connector over hangs the module board slightly. Because of this overhang a support plate is needed to ensure the connector gets fully seated without bowing of the PCB.

Extraction tools are available and suggested for backplane connector removal.

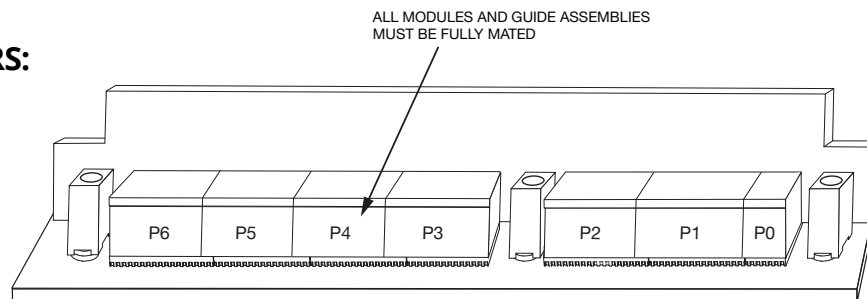
## VISUAL AID

The illustration below shows a typical application of RVPX connectors. This illustration should be used by production personnel to ensure a correctly applied product.

## MOUNTED CONNECTORS:



## MATED CONNECTORS:



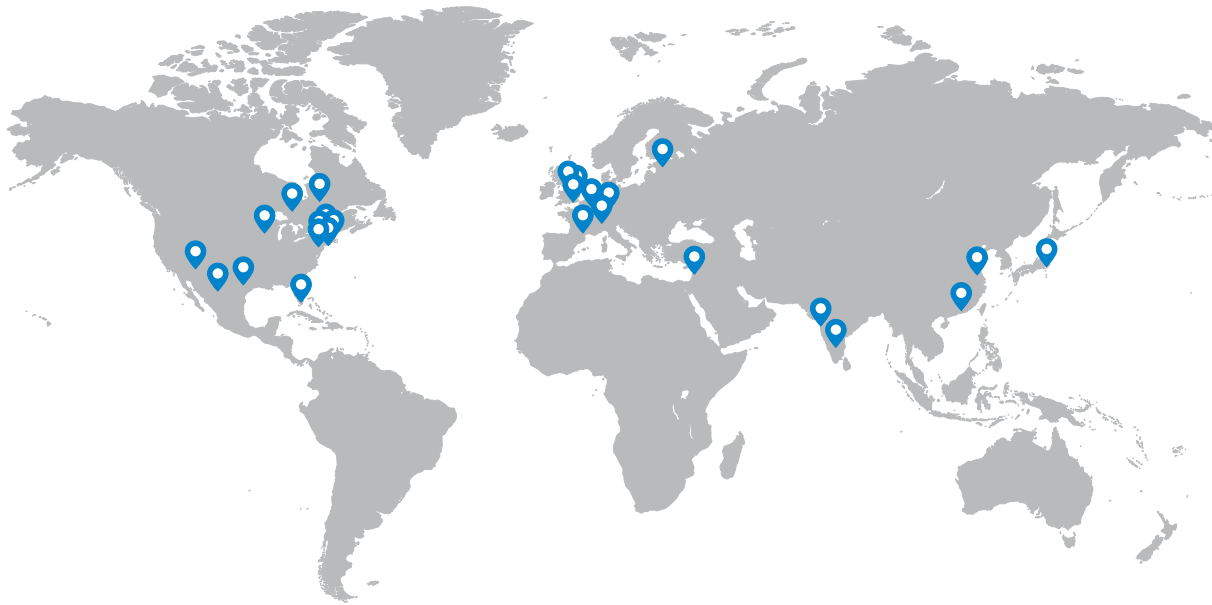








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