

HIGH-PERFORMANCE TEST ASSEMBLIES TO 70 GHz

#### **FEATURES & BENEFITS**

The high-density array designs and advanced cabling solutions within Samtec's Bulls Eye\* product family support test and measurement applications to 70 GHz.

- Compression interface to the board provides easy on/off and eliminates soldering costs
- High-density, space-saving design
- Enables smaller evaluation boards and shorter trace lengths
- Installation: while the attach process for each series is similar, each have unique specifications that need to be observed







#### **HIGH-DENSITY & SPACE-SAVING**

Enables smaller evaluation boards and shorter trace lengths.

## PRODUCT FAMILY CROSS REFERENCE GUIDE

ASSEMBLY	70 GHz	50 GHz	40 GHz	20	GHz
End 2 Connectors	1.85 mm	2.40 mm (50 GHz)	2.92 mm (40 GHz)	2.92 mm (2 Row)	2.92 mm (4 Row)
Samtec Series	BE70A	BE40A		BDRA	BQRA
Cable Type	.086	MWC-2350CU-01		MWC-2350-01	
Cable Management	Yes				
PCB Transmission	Microstrip or Stripline			Stripline	
Design	Spring-Loaded Contact; 360° Grounding	Pogo-Pin for Signal & Ground		Fixed-Pin for Signal; Elastomer & Block for Ground	
No. of Positions	2x 3, 4, 6, 8, 10, 12, 14, 16			2x 12	20
Impedance	50 Ω				
FPGA Development Kit	Xilinx® Zynq® UltraScale+™ RFSoC ZCU1275				Xilinx® Virtex® UltraScale™ FPGA VCU110

## 50 GHz & 40 GHz ASSEMBLIES



OVERALL LENGTH

-"XXXX"

= Overall length

in millimeters

-0152 (0152 mm) 5.984" to -9999 (9999 mm) 393.7"

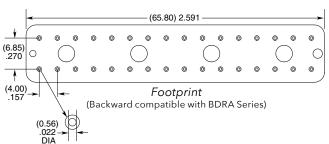
PHASE MATCHING POSITIONS PER ROW **TRANSMISSION** BE40A FND 2 -S **-92SJ** -2 -03, -04, = Stripline = 40 GHz, 2.92 mm Straight Jack = 2.0 Pico-second -06, -08, -10, -12, -M-5 **–24SJ** -14, -16 = Microstrip = 50 GHz, 2.40 mm Straight Jack = 5.0 Pico-second -92SP -N = 40 GHz, 2.92 mm Straight Plug = No Phase Matching -24SP = 50 GHz, 2.40 mm Straight Plug

#### BE40A

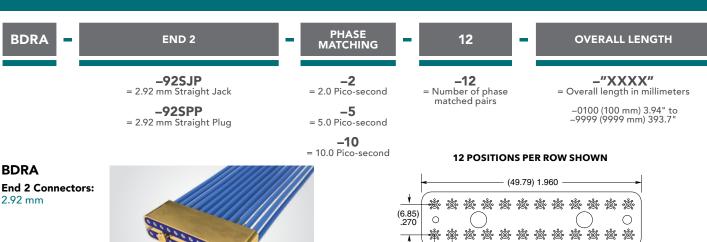
**End 2 Connectors:** 2.40 mm (50 GHz) 2.92 mm (40 GHz)

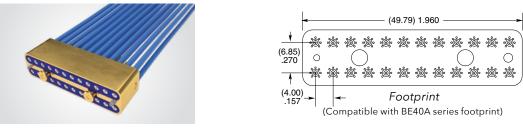


# **16 POSITIONS PER ROW SHOWN**



### 20 GHz ASSEMBLIES





PHASE MATCHING **BQRA** END 2 10 **OVERALL LENGTH** -"XXXX" **-92SJP** -2 = 2.92 mm Straight Jack = 2.0 Pico-second = Number of phase = Overall length in millimeters matched pairs -0100 (100 mm) 3.94" to **-92SPP** -5 -9999 (9999 mm) 393.7' = 2.92 mm Straight Plug = 5.0 Pico-second **-10** 20 POSITIONS, 4 ROWS = 10.0 Pico-second

**BQRA End 2 Connectors:** 2.92 mm



