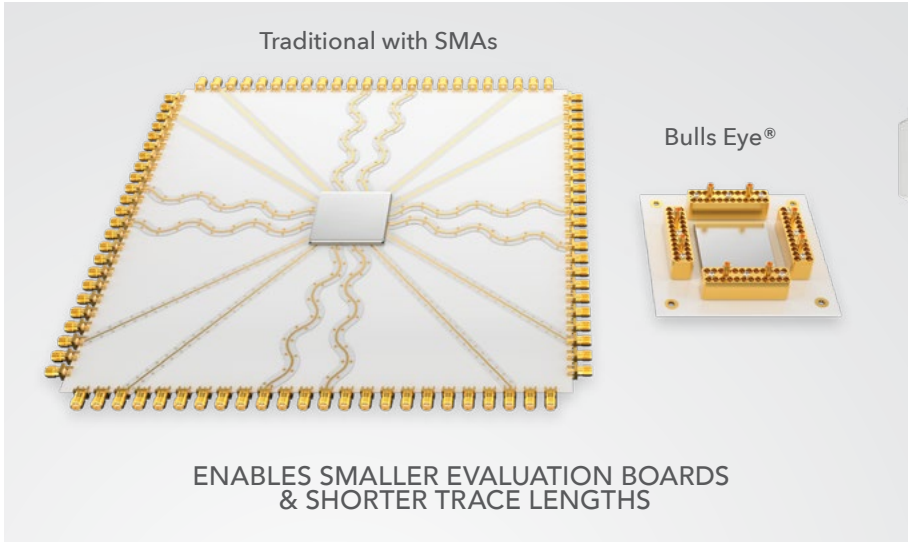




# TEST & MEASUREMENT

## OPTIMIZED PERFORMANCE TO 90 GHz

### BULLSEYE® TEST POINT SYSTEM



### Bulls Eye® High-Performance Test

The Bulls Eye® high-performance test assembly features a high-density, space-saving design that enables smaller evaluation boards and shorter trace lengths in test and measurement applications to 90 GHz.

- Compression mounts to the board for placement directly adjacent to the SerDes being characterized
- Solderless design improves cost and is easy to use within a lab setting
- End 2 connection to instrumentation: 1.00 mm, 1.85 mm, 2.40 mm or 2.92 mm
- High-density, space-saving design
- Single row or double row
- Complete list of applications: SerDes characterization, clock/data recovery (CDR), mmWave radar, automated test equipment, FR2 5G networks



DC TO	PAM 4
90 GHz	224 Gbps



[samtec.com/BullsEye](http://samtec.com/BullsEye)

ASSEMBLY	90 GHz	70 GHz	50 GHz	40 GHz	TEST ASSEMBLY	SERDES CHARACTERIZATION
Block Bottom View					BE90A, 90 GHz	<div style="background-color: #0056b3; color: white; padding: 5px; text-align: center;"> <b>PAM 4</b>  <span style="font-size: 2em; font-weight: bold;">224</span>            G b p s         </div>
End 2 Connector	1.00 mm	1.85 mm	2.40 mm	2.92 mm		
Samtec Series	BE90A	BE70A	BE40A			
Cable Type	.047	.086	MWC-2350CU-01		BE70A, 70 GHz	<div style="background-color: #0056b3; color: white; padding: 5px; text-align: center;"> <b>PAM 4</b>  <span style="font-size: 2em; font-weight: bold;">112</span>            G b p s         </div>
Cable Management	Yes					
PCB Transition	Microstrip/CPW or Stripline					
Bulls Eye® Connector Design	Spring-Loaded Contact; 360° Grounding		Pogo-Pin for Signal & Ground		BE40A, 50 GHz	<div style="background-color: #0056b3; color: white; padding: 5px; text-align: center;"> <b>PAM 4</b>  <span style="font-size: 2em; font-weight: bold;">56</span>            G b p s         </div>
No. of Rows	Single or Double		Double			
No. of Positions	<b>1x:</b> 2, 4, 8, 12 <b>2x:</b> 4, 8, 12, 16	<b>1x:</b> 2, 4, 8, 12 <b>2x:</b> 3, 4, 6, 8, 10, 12, 14, 16	<b>2x:</b> 3, 4, 6, 8, 10, 12, 14, 16			
Impedance	50 Ω				SI Evaluation Kit	
FPGA Development Kit	-		Xilinx® Zynq® UltraScale+™ RFSoc ZCU1275			
	-	70 GHz: REF-213864-01	50 GHz: REF-213497-01			

### Bulls Eye® Performance • BE90A, 2 x 4 Footprint

Performance was measured using 50 Ohm coplanar waveguide (CPW) transmission line and 6 layer PCB (Isola Tachyon). The BE90A DUT consisted of a 2 row x 4 position -M (CPW/microstrip) block, 6-inch (152 mm) low-loss microwave cable and 1.00 mm end 2 connectors. Results include the breakout region and BE90A cable assembly. All other effects have been removed by de-embedding (AFR technique).

