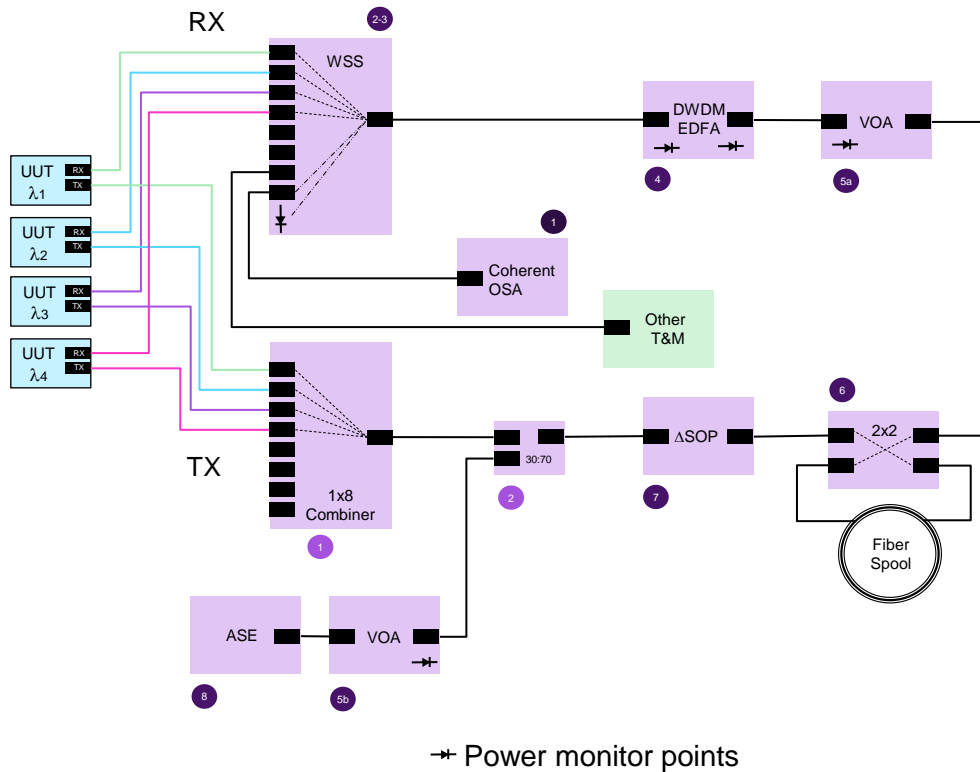


MAP Series Optical Test Platform

Coherent transceiver testing

400GZR Test (up to 7 UUT)

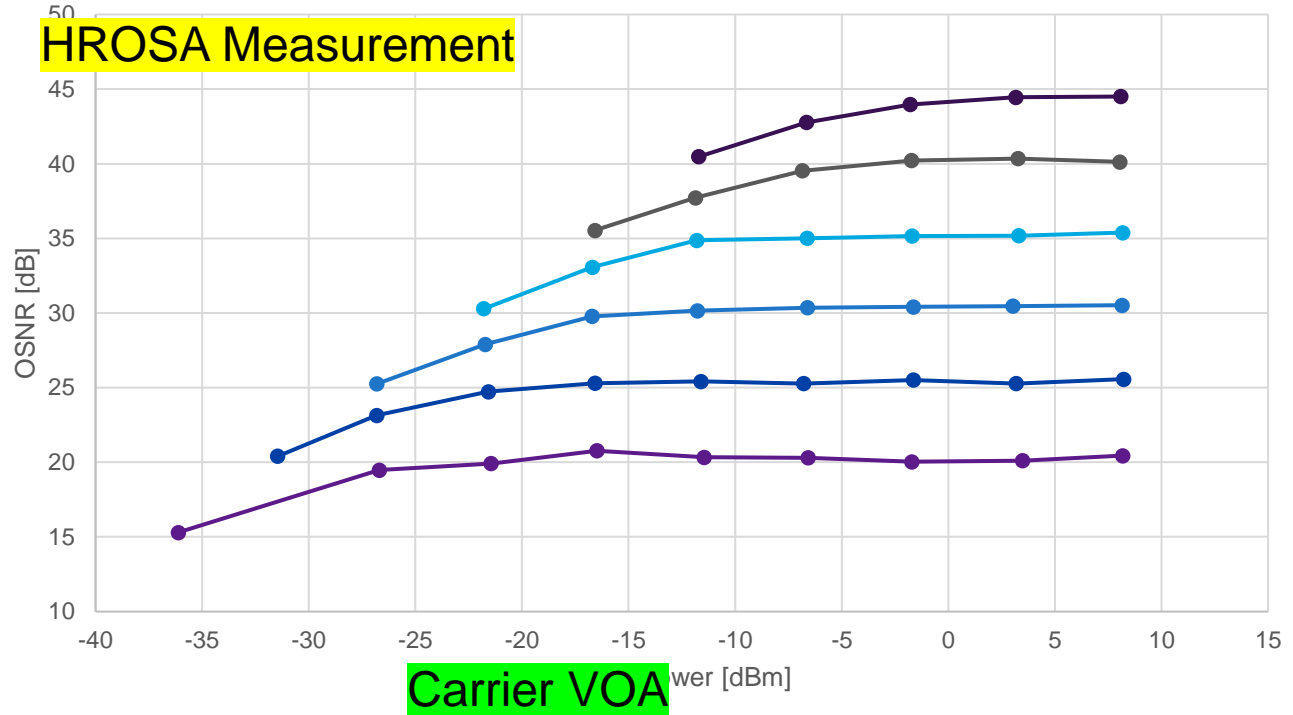


- C-band coherent high-resolution OSA [mHROSA; 1-slot]
 - 300MHz RBW to resolve modulation products
- Programmable DEMUX (WSS) signal manager [mTFX; 2-slot]
 - Set port, $C\lambda$ & BW (0.5 GHz res), Loss (up to 20dB) and shape
 - Hitless switching to embedded OPM and OSA access port
 - Loopback so same UUT or change port/ λ to other UUT
- C-band optical amplifier [mEDFA; 1-slot]
 - 20dBm saturated power, 35dB gain, 5.2 to 5.5 dB NF
- Dual VOA independent level controller [mVOA; 1-slot]
 - EDFA level input control and shutter
 - ASE level input control and shutter
 - 70dB Linear control of OSNR with 0.01 dB resolution
 - Shutter control to toggle to TX limited state
- 2x2 switch add/remove fiber spool [mOSW; 1-slot]
- Rate programmable Pol. Scrambler [mPCX; 1-slot]
 - Random or Rayleigh scrambling modes up to 3Mrad/s
- C-band ASE noise source for OSNR set [mBBS; 1-slot]
 - 1dB wavelength flatness

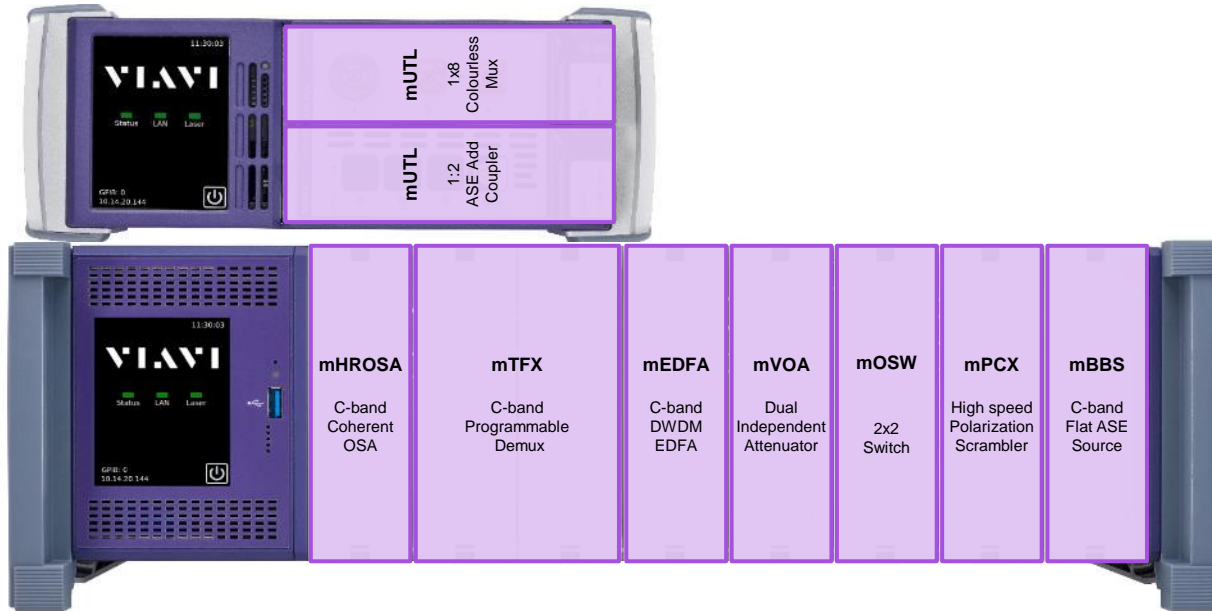
- 1x8 combiner for colourless mux [mUTL; 1-slot]
 - Allow individual TX λ to be independently set
- Broadband noise multiplexer [mUTL; 1-slot]
 - Injection point for ASE to generate controllable OSNR

OSNR Measurements (function of input power and OSNR)

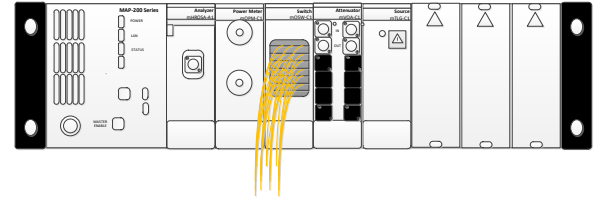
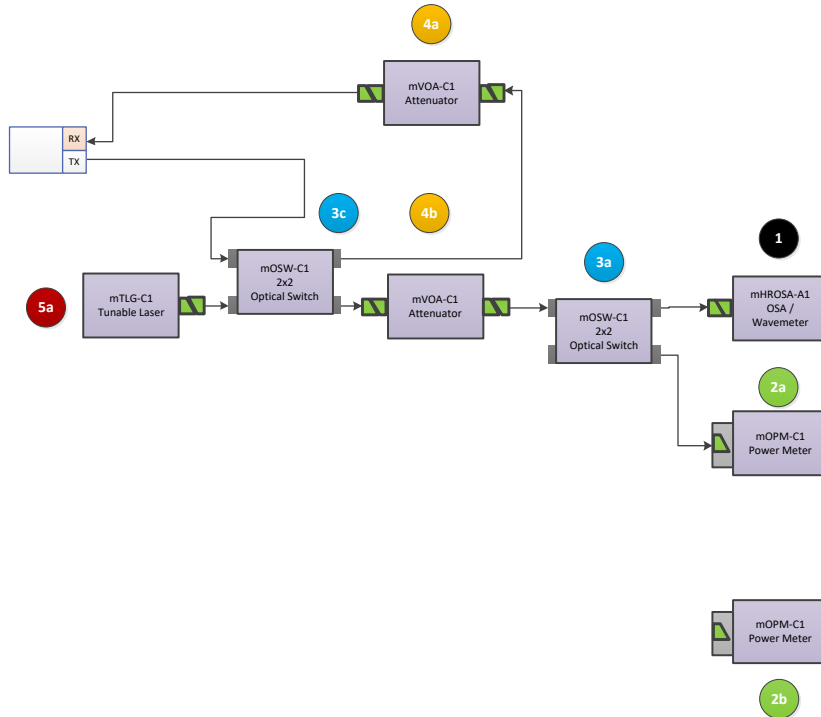
Noise VOA



Module Layout

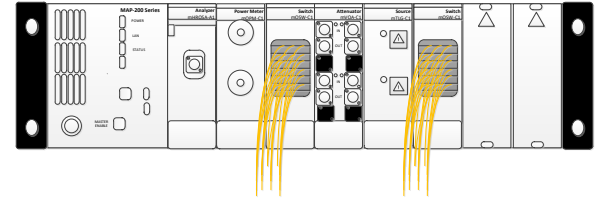
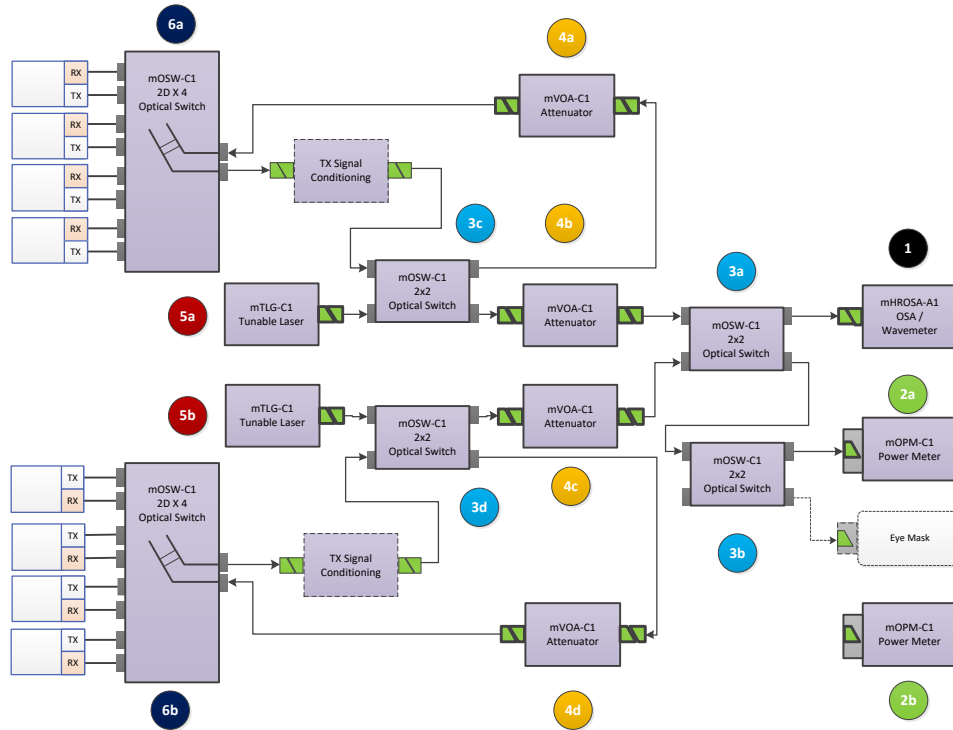


Simple Loopback with a Calibration channel



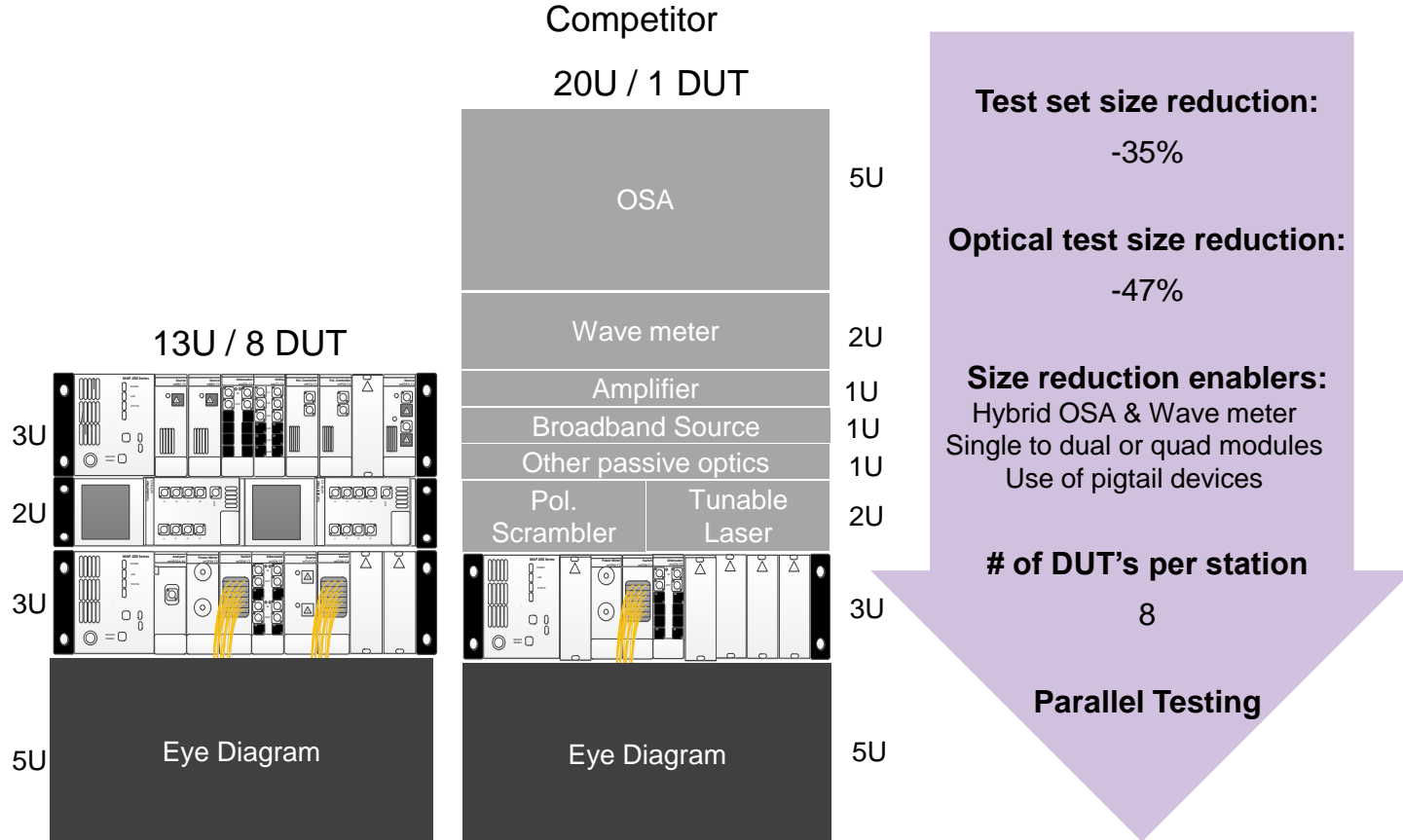
- Loop back and RX sensitivity
- Calibrate RX power monitoring
- Verify wavelength setting
- Basic electrical test

Parallel Test Upgrade



- MAP-200 module density enable doubling the number of DUT for minimal cost and in the same footprint

Putting it all together

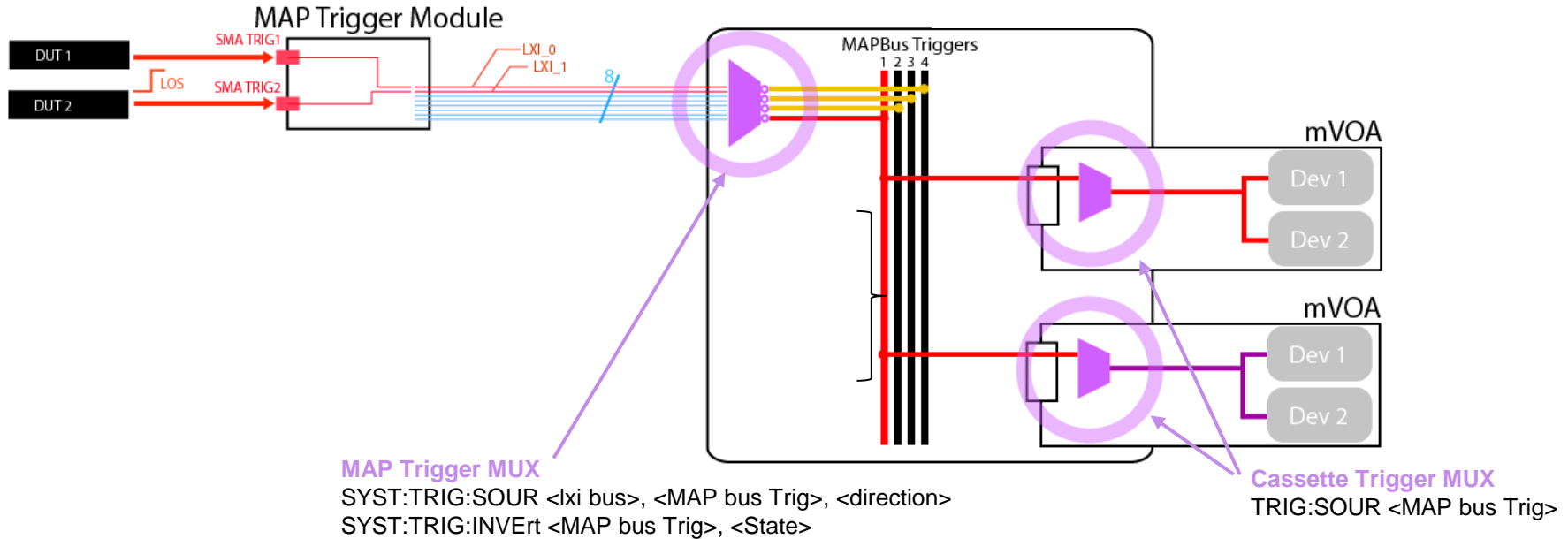


Coming Soon...



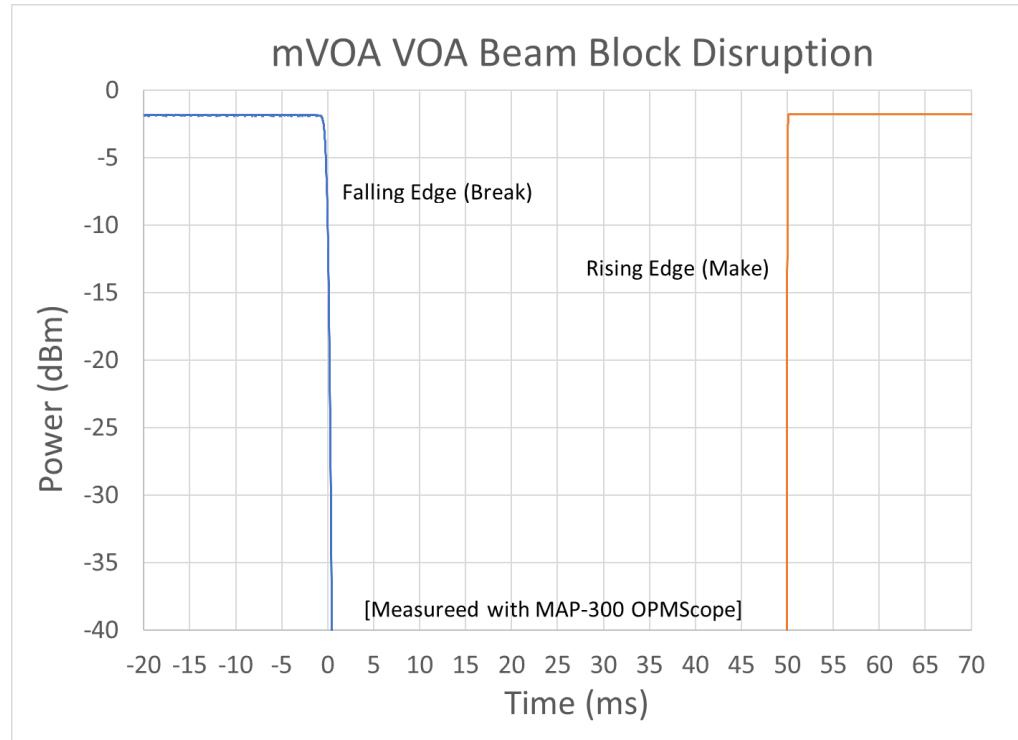
MAP Trigger Architecture for LOS

Dual DUT Proposal



- SMA Trigger INPUT routed to LXI_0 and LXI_1 lines on LXI Cable
- MAP LXI Trigger INPUT MUXed to MAPBus TRIG1 only (*mVOA mod only connects to TRIG1*)
 - Trigger INVERT optional
- mVOA cassette Selects TRIG1 of MAPBus (*mVOA mod only connects to TRIG1*)
 - VOA Trigger is common for both VOA Devices

Optical Beam Block for Transient Testing





VIAVI Solutions

