

Test Report

Test Started: 2019-05-21 11:28:28

Test Run Time: 26.96s

Test Status: Fail

Test Profile: C-C / SS Gen 2 / 5A / SI 5/10Gbps

Test for a Full-Featured Type-C cable that can support USB 3.1 Gen 2 (10 Gbps) and 5 amps. Fails if a cable advertises different capabilities. Requires an E-Marker, all four SuperSpeed pairs, the USB 2.0 D+/D- pair, and SBU1/SBU2 to be present. Signal integrity testing at 10 Gbps and 5 Gbps on the SuperSpeed pairs and 518 Mbps on the high-speed pair is performed.

Error Summary

Cont Continuity DPDM2
DCR DCR D-Vbus4

Cont VConn Thru - Presence

E-Marker

"D" Port

SOP' Data			
	Field	Read Value	Expected Value
✓	Product Type	Passive Cable	Passive Cable
	Product ID	0x0998	Not Specified
	Test ID	0x00BA	Not Specified
	Vendor ID	0x2DE5	Not Specified
	Vendor Name		
	Hardware Version	2	Not Specified
	Firmware Version	1	Not Specified
	Latency	< 10ns (~1m)	Not Specified
	Termination	Passive Cable, V _{CONN} required	Not Specified
✓	Current	5A	5A

"U" Port

SOP' Data			
	Field	Read Value	Expected Value
✓	Product Type	Passive Cable	Passive Cable
	Product ID	0x0998	Not Specified
	Test ID	0x00BA	Not Specified
	Vendor ID	0x2DE5	Not Specified
	Vendor Name		
	Hardware Version	2	Not Specified
	Firmware Version	1	Not Specified
	Latency	< 10ns (~1m)	Not Specified
	Termination	Passive Cable, V _{CONN} required	Not Specified
✓	Current	5A	5A

✓	V _{BUS} Through	True	True
	SOP'' present	False	Not Specified
✓	Speed	USB 3.1 Gen1 and Gen2	USB 3.1 Gen1 and Gen2

✓	V _{BUS} Through	True	True
	SOP'' present	False	Not Specified
✓	Speed	USB 3.1 Gen1 and Gen2	USB 3.1 Gen1 and Gen2

SOP'' Data
SOP'' Controller Not Found

SOP'' Data
SOP'' Controller Not Found

Continuity

Connector Orientation		
Port	Connector Type	Orientation
"U" Port	USB 3.1 Type-C	Flipped
"D" Port	USB 3.1 Type-C	Normal

V _{BUS} Voltage Reference		
	Voltage	Valid Range
✓	4.79 V	4.75 - 5.10 V

Power Shorts		
	Wires	Shorts
✓	V _{BUS} to GND	None
✓	CC to GND	None
✓	CC to V _{BUS}	None

Physical Wiring		
	"D" Port Pin	"U" Port Pin
✓	DM1	DM1
✓	DP1	DP1
✗	DM2	No Connection
✗	DP2	No Connection
✓	SBU1	SBU2
✓	SBU2	SBU1
✓	TX1	RX1
✓	RX1	TX1

Functional Signals		
	Wire	Present
✓	CC	Present
✓	V _{CONN}	Present
✗	V _{CONN} Thru	Absent
✓	SBU	Present
✓	DP/DM1	Present
✗	DP/DM2	Absent
	SOP'	Present
	SOP''	Absent
✓	TX1	Present

✓	TX2	RX2
✓	RX2	TX2

✓	RX1	Present
✓	TX2	Present
✓	RX2	Present
	R _A	Present

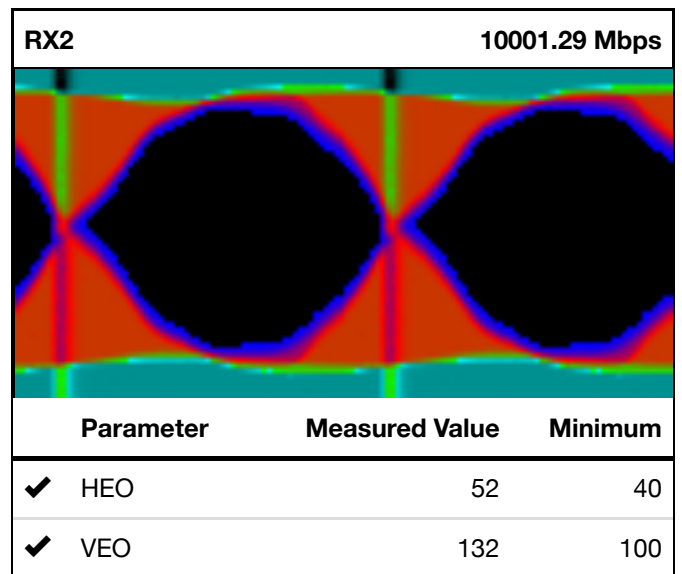
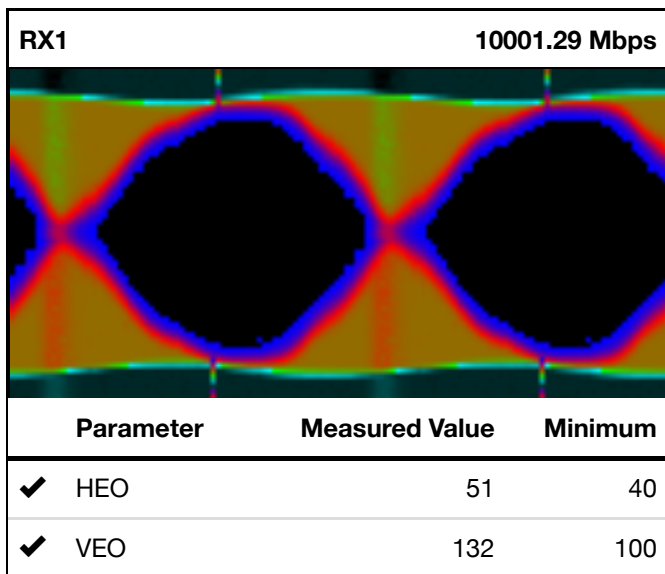
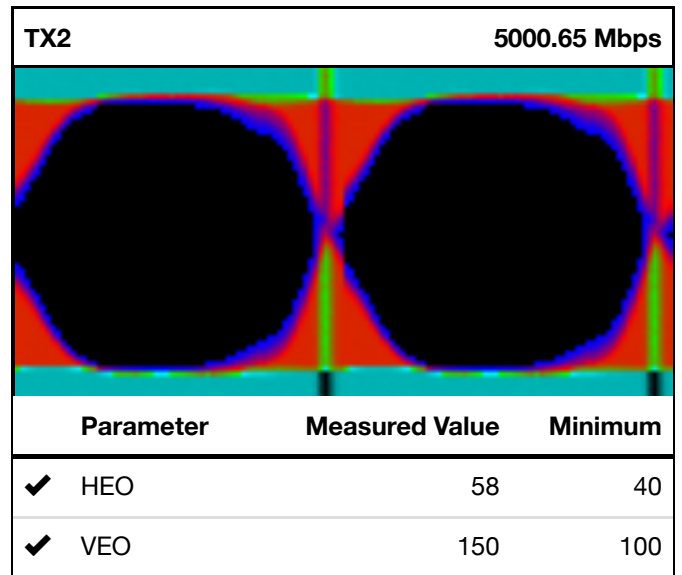
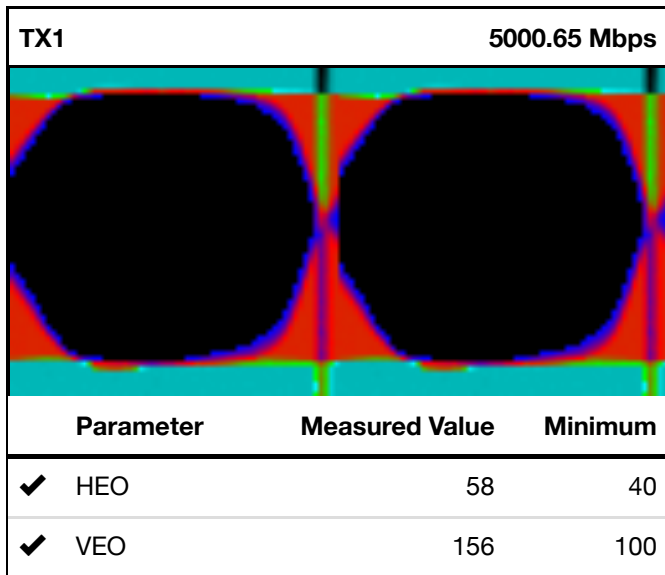
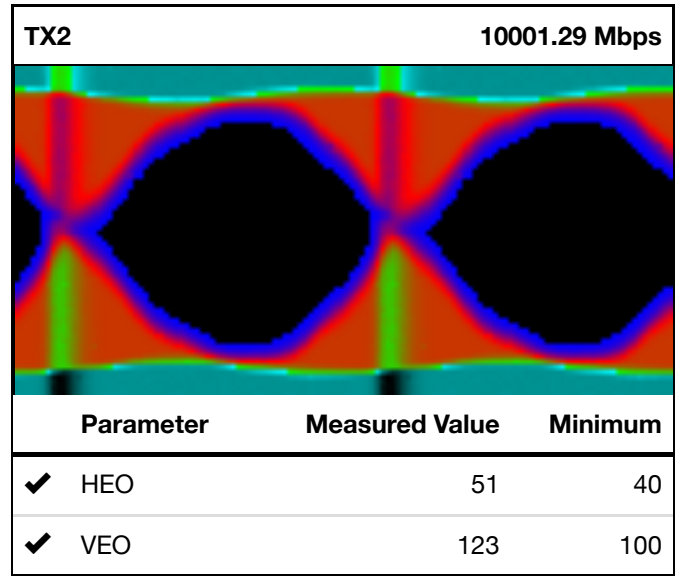
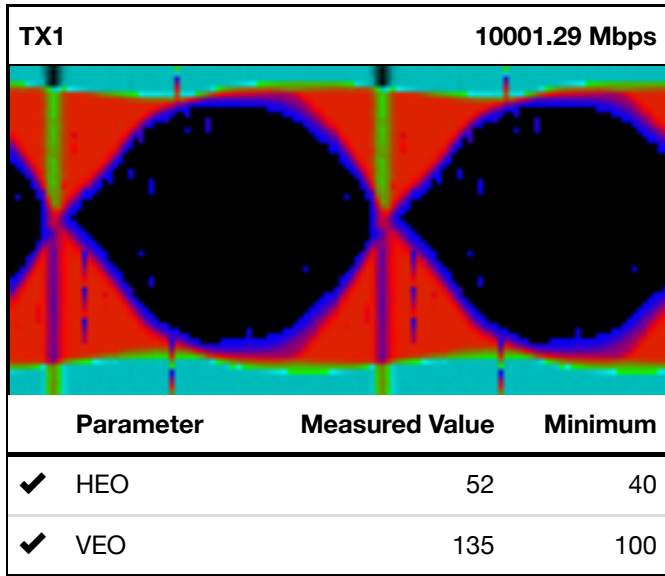
DC Resistance

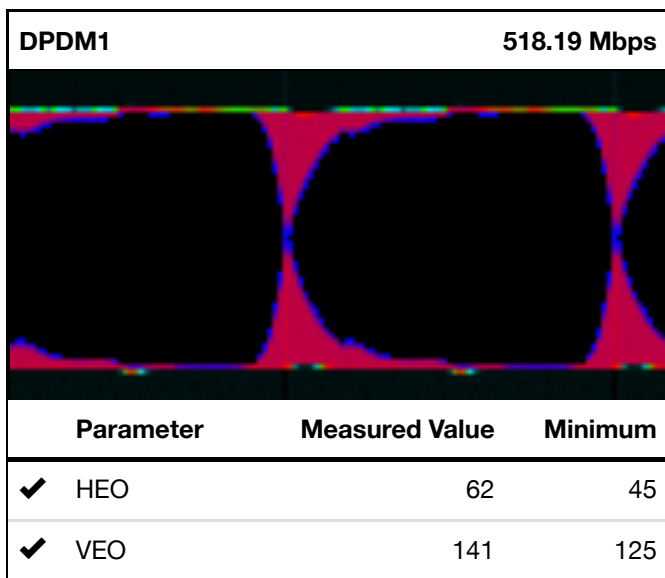
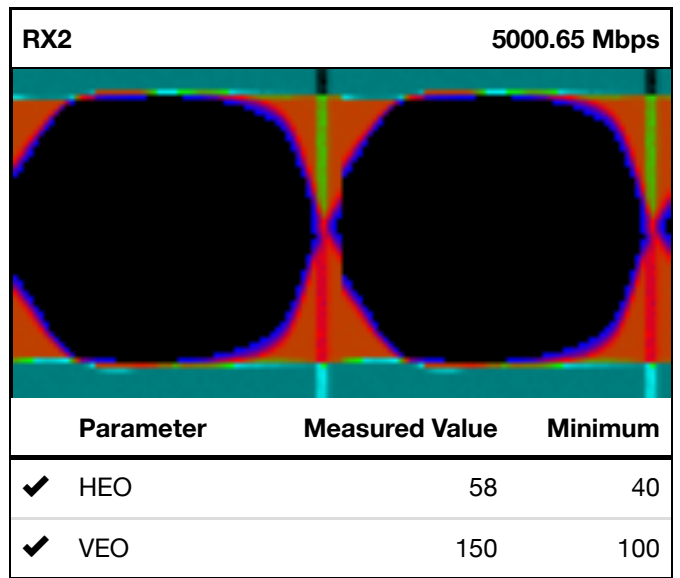
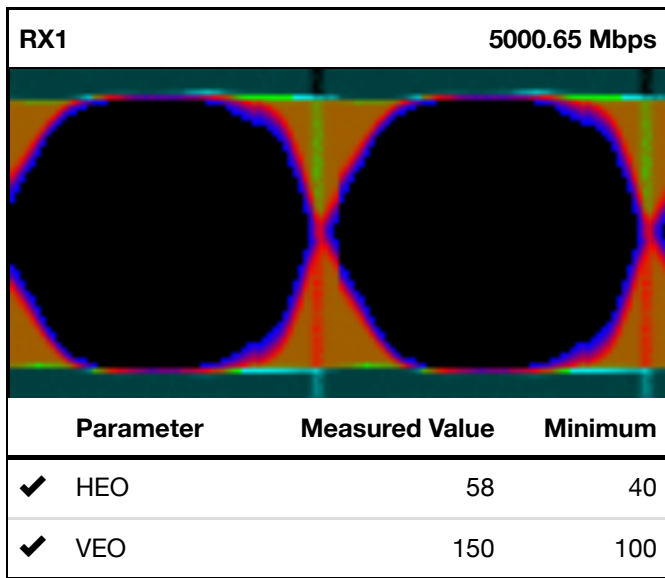
Power Wires			
	Wire	Measured Value	Maximum
✓	GND	33.24 mΩ	50.00 mΩ
✓	V _{BUS}	43.84 mΩ	100.00 mΩ

GND Pins			
	Pin	Measured Value	Maximum
✓	U-A1	14.58 mΩ	40.00 mΩ
✓	U-A12	20.33 mΩ	40.00 mΩ
✓	U-B1	12.52 mΩ	40.00 mΩ
✓	U-B12	27.33 mΩ	40.00 mΩ
✓	D-A1	26.83 mΩ	40.00 mΩ
✓	D-A12	22.16 mΩ	40.00 mΩ
✓	D-B1	18.08 mΩ	40.00 mΩ
✓	D-B12	31.24 mΩ	40.00 mΩ

V _{BUS} Pins			
	Pin	Measured Value	Maximum
✓	U-A9	8.36 mΩ	40.00 mΩ
✓	U-B4	23.76 mΩ	40.00 mΩ
✓	U-B9	14.07 mΩ	40.00 mΩ
✓	U-A4	8.43 mΩ	40.00 mΩ
✓	D-A9	31.65 mΩ	40.00 mΩ
✓	D-B4	13.27 mΩ	40.00 mΩ
✓	D-B9	8.63 mΩ	40.00 mΩ
✗	D-A4	59.04 mΩ	40.00 mΩ

Signal Integrity





Equipment

Device Information	
Name	Value
Promira Serial Platform Serial Number	2416-622816
Advanced Cable Tester Serial Number	2468-196450
Hardware Version	0.93
Firmware Version	1.12
Web Version	1.12

Connector Test & Insertion Counts		
Port	Connector	Counts
Upstream	USB 3.1 Type-C	49
Downstream	USB 3.1 Type-C	49
Upstream Adapter	None	
Downstream Adapter	None	