USB 3.1 Product Test Matrix

Updated 2/9/2016

		USB 3.1 xHCI /SuperSpeed Testing											USB 2.0 LS/FS/HS Testing			
		USBCV Chap 9 Tests	USBCV Class Tests	xHCI Host Tests	3.1 Hub CV	3.1 Electrical	3.1 Interop with U1/U2 enabled	3.1 Backwards Compat-ibility with U1/U2	xHC De-bug Cap	Link Tests	Current Test Measurement	Battery Charging	USBCV Chap 9	USBCV Class Tests	2.0 Gold Tree Interop using EHCI	2.0 Electrical
xHCI Host	Silicon and IP	All SS Silicon	All tests, all speeds	Full Test Suite	Gen X Hub	✓	✓	✓	✓	✓	n/a	✓	All speeds	All	n/a	✓
	End Product*	All SS Silicon	All tests, all speeds	Interface Tests	Gen X Hub	✓	✓	✓		✓	n/a	✓	All speeds	All	n/a	✓
USB 3.1 Devices: Silicon, IP, End Product	Device*	✓	Applic-able class tests	n/a	n/a	✓	✓	n/a	n/a	✓	✓	✓	Run for all 2.0 supported speeds	Appic-able class tests	✓	✓
3.1 Hubs	Silicon and IP	✓	All classes DS	n/a	SS Hub, Analyzer and Loopback Tests	UFP and DFPs	✓	✓	n/a	Hub LVS + Link UFP and DFPs	✓	✓	All speeds + classes DS	Hub + all devices DS	✓	UFP and DFPs
	End Product*	✓	All classes DS	n/a	SS Hub Tests	UFP and DFPs	✓	n/a	n/a	Hub LVS + Link UFP and DFPs	✓	✓	All speeds + classes DS	Hub + all devices DS	✓	UFP and DFPs

Test Notes:	
	*** Products with USB Type-C connectors must pass testing outlined in USB-C Product Matrix**
	3.1 Electricals on Agilent or LeCroy or Tek using external BERT
	Backwards Compatibility includes testing subset of 150 popular 2.0 devices for Host silicon and IP.
	Chapter 9 CV tests must be run at the root port for SS and also behind a SS hub.
	3.1 Hubs must have Hub TT tests run on the HS portion of the hub if the hub is not a separate, certified 2.0 hub chip.
	Current measurement with CV : unconfigured, U1, U2, U3. Current measurement with host driver stack: Operating current.
	Link DFP tests for Host and Hub include tests that require USB30CV aid.