

USB 3.2 Product Test Matrix

Updated 3/13/2018

		USB 3.2 xHCI / Enhanced SuperSpeed Testing											USB 2.0 LS/FS/HS Testing			
		USBCV Chap 9 Tests	USBCV Class Tests	xHCI Host Tests	3.2 Hub CV	3.2 Electrical	3.2 Interop with U1/U2 enabled	3.2 Backwards Compatibility with U1/U2	xHC Debug Cap	Link Tests	Current Test Measurement	BC 1.2	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 3.2 Devices: Silicon, IP, End Product	Device*	✓	Applicable class tests	n/a	n/a	✓	✓	n/a	n/a	✓	✓	✓	Run for all 2.0 supported speeds	Applicable class tests	✓	✓
3.2 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
	USB 3.2 Electricals on Keysight or Teledyne LeCroy or Tek using external BERT
	Backwards Compatibility includes testing subset of 150 popular 2.0 devices for Host silicon and IP.
	USB 3.2 CV tests run at the root port (Gen 1x1 and Gen 2x1) and behind hub (Gen 1x1 and Gen 2x1).
	USB 3.2 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.
USB Type-C and Link tests for Host and Hub include tests that require USB30CV aid.	