

# USB 3.2 Product Test Matrix

updated 11/14/2018

		xHCI and USB 3.2 Enhanced SuperSpeed Testing											USB 2.0 Testing		
		USB3CV Chap 9 Tests	USB3CV Class Tests	USB3CV Connector Type Tests	XHCICV	Hub3CV	3.2 Electrical	3.2 Interop with U1/U2 enabled	xHC Debug Cap	Link Tests	Current Test Measurement	BC 1.2	USB2CV Chap 9	USB2CV Class Tests	2.0 Electrical
xHCI Host	Silicon and IP	All speeds	Tests applicable to KGDs	Run with KGDs	Full Test Suite	Gen X Hub	✓	✓	✓	✓	n/a	✓	All speeds	All	✓
	End Product*	All speeds	Tests applicable to KGDs	Run with KGDs	Interface Tests	Gen X Hub	✓	✓		✓	n/a	✓	All speeds	All	✓
USB 3.2 Devices	Silicon and IP	✓	Applicable class tests	✓	n/a	n/a	✓	✓	n/a	✓	✓	✓	Run for all 2.0 supported speeds	Applicable class tests	✓
	End Product*														
USB 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	Hub LVS + Link UFP and DFPs	✓	✓	All speeds + classes DS	Hub + all devices DS	UFP and DFPs

Test Notes:	<b>* Products with USB Type-C connectors must pass testing outlined in USB-C Product Matrix</b>
	xHCI silicon and IP cert includes testing subset of 150 popular 2.0 devices.
	USB3CV 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.	