

USB Device Receiver Test Solution

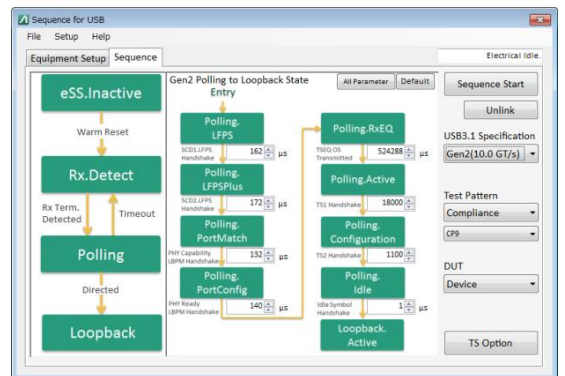
High-Speed Serial Data Test Software MX183000A
Signal Quality Analyzer MP1800A

Evaluate USB Serial Transport

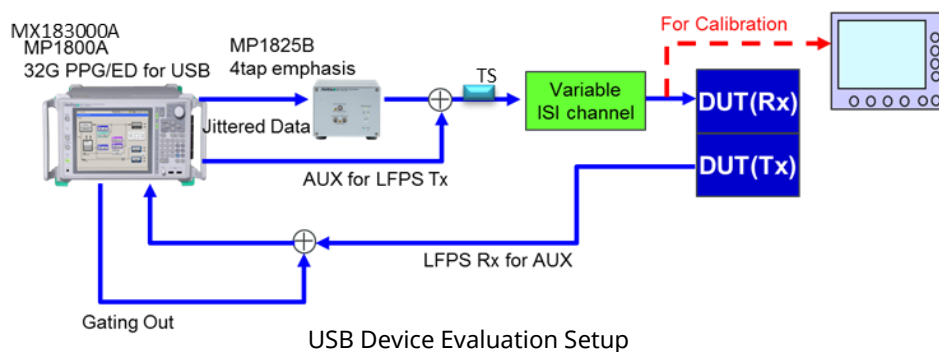
The explosion in data volumes created by the spread of IoT and Cloud Computing services is leading to development of faster serial equipment interfaces. The transport rates of USB high-speed serial interfaces used by digital equipment are moving to higher speeds to handle these large data volumes and USB3.1 Gen2 will support 10 Gbit/s. Additionally, the small Type-C connector is consolidated in the USB 3.1 specifications. The High-Speed Serial Data Test Software MX183000A is application software for the Signal Quality Analyzer MP1800A; it is targeted at design and testing for USB3.1 standards. It supports communications with devices required for evaluating USB devices, as well as Jitter Load tests for testing device design margins, making design and verification efficient.

Features of High-Speed Serial Data Test Software MX183000A

- USB Link Sequence Generation Function (MX183000A Option-PL012)
 - ✓ USB3.1 Gen1 to 2 evaluation by transitioning to Loopback mode
 - ✓ 8B/10B, 128B/132B, Scramble, SKIP Insertion, LFPS generation



USB Link Sequence Generation Screen



USB Device Evaluation Setup

■ **Typical Specifications**

USB Link Sequence MX183000A-PL012

Specification	USB 3.0, 3.1 Gen1 (5 Gbit/s), 3.1 Gen2 (10 Gbit/s)
Test Pattern	Compliance (Gen1: CP0, CP1, CP2, CP4, CP5, CP6, Gen2: CP9), User
LTSSM State	Transition to eSS.Inactive, Rx.Detect, Polling, Loopback
Loopback through	Configuration
TS Setting Parameter	SKIP Insertion, 8B/10B,128B/132B, Scrambling

■ **Typical Configuration**

Model	Name	Options	Qty
MP1800A	Signal Quality Analyzer	001, 007, 014, 032	1
MU183020A	28G/32Gbit/s PPG	012, 030	1
MU181500B	Jitter Modulation Source	-	1
MP1825B	4Tap Emphasis	002	1
Components	K240C Power Divider		2
	J1510A Pick OFF Tee		1
	J1343A Coaxial Cable 1.0 m (SMA, DC to 18 GHz)		3
	J1551A Coaxial Matched Skew Cable (0.8 m, K-connector)		1
	K220B Adapter K(m.)-K(m.)		2
	K261 DC Block		1
	AT-102 2dB Attenuator		1
	J1359A COAXIAL ADAPTOR (K-P.K-J, SMA)		1
	J1632A TERMINATOR		1
	J1349A COAXIAL CABLE 0.3M (SMA connector)		1
K250 Bias Tee		2	

■ **Ordering Information**

Model/Code	Name
MX183000A	High-Speed Serial Data test software
MX183000A-PL012	USB Link Sequence