USB High Speed Signal Quality
Test Fixture Set
USB-TF-HS-EP-SET
(Eye Pattern Test Only)
Device Test Fixture (USB-TF-HS-DEP-V21)

- **Layout**

- **Application**
  - Design for High Speed Device Upstream Signal Quality Test by the SMA connectors. (EL_2, 4, 5, 6 and 7)
  - Related with “USB-IF Device High-Speed Electrical Test Procedure” Section 4.4
  - Can apply external power over USB cable from “POWER PORT”
  - “INIT PORT” is for link with Host, and “TEST PORT” is for link with Upstream Port Under Test
1. TEST side: when upstream port under test enters to Test Mode (Test_Packet), switch to TEST side to get the proper waveform.

2. Connect to USB root port via the USB cable to provide the external power for the fixture.

3. Connect to USB host port via the USB cable for the device initialization.

4. Connect to upstream port under test via the USB cable as short as possible.

5. Connect to the oscilloscope via SMA cables (P5: D+, P3: D-) for High Speed Signal Quality Test.

6. Jump setting
   a. Jump 1-2 is always short.
   b. Jump 3-4 short: Fixture power from Vbus of INIT PORT (3). (Default)
   c. Jump 5-6 short: Fixture power form POWER PORT (2).
Host Test Fixture (USB-TF-HS-HEP-V20)

- **Layout**

- **Application**
  - Design for High Speed Host Downstream Signal Quality Test by the SMA connectors. (EL_2, 3, 6 and 7)
  - Related with “USB-IF Host High-Speed Electrical Test Procedure” Section 4.4

- **Placement direction**

  1. Connect to downstream port under test
  2. Connect to the oscilloscope via SMA cables (SMA1: D+, SMA2: D-) for High Speed Signal Quality Test.
  3. Vbus probing point