

Test Procedure for the 90W PD3.0/QC3.0 demo board



The following steps detail the test procedure for 90W PD3.0/QC3.0 demoboard:

Necessary Equipment:

- 1 Current limited 90 ~ 264Vrms AC source (current limited to avoid board destruction in case of a defective part) (e.g. Chroma 61602)
- 1 Power Meter(e.g. YOKOGAWA WT210)
- 1 DC Volt-Meter able to measure up to 50V DC. (e.g. Agilent 34401A)
- 1 DC Amp-Meter able to measure up to 5A DC. (e.g. Agilent 34401A)
- 1 DC Electronic Load 0 - 60A (e.g. Chroma 6312A with 63115A Module)
- 1 USB PD emulator and 1 TYPE C E-mark Cable



Figure 1: PD Test Setup for 90W PD/QC Demoboard

Test Procedure:

- 1. Connect the test setup as shown in Figure 1.**
- 2. Apply an input voltage, $U_{in} = 90 - 264V_{ac}$**
- 3. Apply $I_{out}(load) = 0A$**
- 4. Check that V_{out} is no higher than 5.1V**
- 5. Push PD or QC emulator mode key to change voltage**
- 5. Increase or Decrease $I_{out}(load)$**
- 6. Check that V_{out} is between 5V and 20V and apply related load current**
 - 1. 5V @ 3 Amps**
 - 2. 9V @ 3 Amps**
 - 3. 15V @ 3 Amps**
 - 4. 20V @ 4.5 Amps**

- 7. Power down the load**
- 8. Power down Vac**
- 9. End of test**