

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



The following steps detail the test procedure for 90W PD30/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**

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