## GRL Introduces 2nd Generation USB Power Delivery and USB Type-C<sup>™</sup> Tester (GRL-USB-PD-C2)

Complete solution to test USB Power Delivery 3.0 and USB Type-C Alternate Mode designs

SANTA CLARA, Calif., September 18, 2017 – Granite River Labs (GRL), a global leader in engineering services and test solutions for connectivity, today announced release of their second generation USB Power Delivery (USB PD) and USB Type-C test solution, GRL-USB-PD-C2 (GRL-C2). GRL-C2 supports the USB Implementers Forum (USB-IF) compliance program for the USB Power Delivery Specification Revision 3.0, as well as Alternate Mode testing of USB Type-C designs. GRL-C2 enables product developers to quickly run full compliance and validation test suites at the push of a button.

The USB Power Delivery specification provides more flexible power delivery along with data over a single cable, as well as the control mechanism for USB Type-C Alternate Modes for Thunderbolt 3, DisplayPort, and HDMI. USB PD version 3.0 addresses mobile charging, and adds new features such as Programmable Power Supply (PPS), Fast Role Swap and Battery Status.

GRL-C2 provides an automated, efficient, and fully-integrated way to perform all required USB Power Delivery version 3.0 and 2.0 and related tests over the USB Type-C connector, as well as PHY test automation for USB Type-C Alternate Modes. GRL-C2 automates all required USB PD compliance tests for power providers (chargers), consumers, dual-role ports, and cable and adapter E-Markers. GRL-C2 also incorporates analyzer capability to sniff PD traffic.

GRL-C2 integrates all required USB PD tests into a single 2-port tester, including all tests supported on GRL's USB-IF approved first generation solution introduced in 2015. Each port can be configured independently as a PD Provider or Consumer.

"As a USB-IF member, GRL plays a valued role in the development of USB Power Delivery implementations," said Jeff Ravencraft, USB-IF President and COO. "These types of compliance test solutions, that support our USB-IF Compliance Program, are valuable tools for users to validate their USB PD products and promote device interoperability."

"We are thrilled to release our new all-in-one 2-port test solution that supports the USB PD 3.0 specification and offers complete test coverage for USB Type-C designs," said Mike Engbretson, GRL Chief Technology Engineer. "GRL is very proud of our efforts to provide leading edge test solutions and engineering services for compliance, validation, and debugging of technologies using the USB Type-C connector as they continue to evolve."

Key features of GRL's Second Generation USB Type-C Power Delivery Solution (GRL-USB-PD-C2):

- One solution to support all USB PD compliance test specifications and MOIs
- Supports all USB PD devices including cable and adapter E-Markers, power providers (chargers), power consumers, and dual-role devices

- USB-IF compliance specifications supported:
  - USB PD 3.0 tests
  - USB PD 2.0 Power Delivery Test Plan Communications Engine and Deterministic MOIs
  - Source Power Test (SPT), including PPS Provider Voltage Step and Consumer Current Fold-back
  - Functional tests USB PD power providers
- Integrated PHY Test Controller for DisplayPort, Thunderbolt 3, and HDMI Alternate Mode testing, supporting all major oscilloscope and BERT platforms
- Supports DisplayPort over USB Type C CTS Chapter 10 USB PD Protocol Tests
- Provides two independent USB PD test ports with 240W Provider and 200W Consumer emulation
- Supports BMC-PHY-TX on any Windows7+ oscilloscope from Keysight, Tektronix, Rohde & Schwarz, or Teledyne LeCroy
- Automatically generates comprehensive .pdf, .csv, and .xml test reports

More information is available at <a href="http://graniteriverlabs.com/usb-pd/">http://graniteriverlabs.com/usb-pd/</a>.

## Availability:

GRL-USB-PD-C2 can be ordered now, with discounts available for larger orders. Contact Granite River Labs (info@graniteriverlabs.com).

## **About Granite River Labs**

Granite River Labs (GRL) provides end-to-end Engineering Services and Test Solutions to help hardware engineers adopt connectivity technologies. A trusted partner of up-and-coming hardware developers to some of the largest companies in the world, GRL combines recognized industry experts, high performance test equipment, and automated test solutions. For more information, please visit us at <a href="https://www.graniteriverlabs.com">www.graniteriverlabs.com</a>.

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