Diamond$_X$ PMVI$_X$

Voltage /Current Source for Mobile, Power Management, SOC, Automotive and MCU ICs

The PMVI$_X$ instruments is designed to meet the high-volume testing challenges of modern smartphone and tablet PMIC devices, as well as higher power MCUs and automotive ASSP devices.

Automotive

Consumer

Flat Panel Display

Power Management

Industrial & Medical

MCU

Mobility

Highlights

- PMVIx meets the test challenges of integrated mobile power management devices with dozens of DC-DC and linear regulators ranging from under 100 mA to several amps
- These devices often have high accuracy battery management functions, voltage references and PWM controllers

Features

- High density V/I and DPS instrument
- Four quadrant
- Source or sink 1 A continuous current per channel, with ganging to 16 A
- Voltage up to 20 V
- Dedicated programmable current load circuit
- 64k waveform source/capture
- Bypass mode to connect external resource through channel

- **72 Channels Per Board**
- **4-Quadrant Operation**
- **Max Voltage -2.5 to +20 V**

- **Voltage measure accuracy to ±(0.02% MV +100 µV)**
- **Up to ±1A/Channel, gang to 16A**
- **Precision ADC**

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High Density V/I and DPS Instrument

PMVI$_X$ provides a high density V/I and DPS instrument that is specifically designed to test advanced Mobility PMIC devices, as well as a range of ASSP and MCU devices.

Voltage and Current Measurement

The PMVI$_X$ can source or sink 1 A per channel continuously, and be ganged to 16 A. It also has voltage ranges up to 20 V to stress test battery charger inputs or put MCU devices into test modes.

Load Testing on Powerful DC-DC Converters

A dedicated programmable current load circuit can perform load testing on powerful DC-DC buck converters commonly found on mobility PMIC devices, including step load tests while measuring current or voltage transients.

General

- 72 channels per board
- Four quadrant
- 1 A continuous current per channel, with ganging to 16 A
- -2.5 V to +20 V range
- Current measure accuracy to 11 nA
- Voltage measure accuracy to ±(0.02% MV +100 µV)
- 64k waveform source/capture
- Trigger to/from other instruments
- Time event digitizer per channel with 128 location memory
- Control bit per channel
- Bypass mode to connect external resource through channel

Waveform Measurements

A per-channel time event digitizer can measure PVM waveforms, voltage or current ramps, or perform transient detection. Each channel can source or capture waveforms up to 64k deep, for power supply rejection ratio (PSRR) or brown out tests.

Bypass Mode to Connect External Resource

A bypass path per channel allows other analog or digital resources to be connected to the DUT through the PMVI$_X$ channel without an external relay, conserving valuable load board real estate.

All specifications are subject to change without notification and are for reference only. For detailed performance specifications, please contact Cohu.