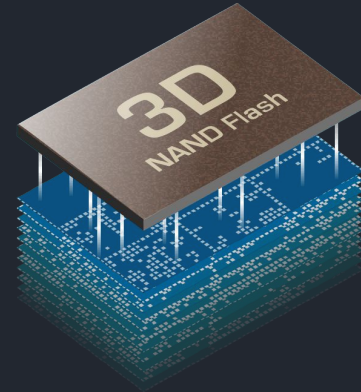


PCM2 - DC Power Analyzer

Product Brief & Datasheet

Access at anytime with our small, convenient and fast testing tools.



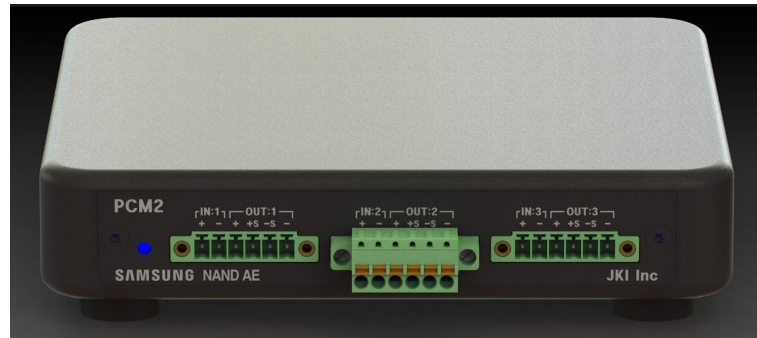
April 2023

PCM2 Overview

The PCM2 DC Power Analyzer provides unrivaled productivity gains when sourcing and measuring DC voltage and current into a DUT.

The JKI PCM2 DC Power Analyzer is a highly integrated instrument that combines up to three advanced DC power supplies, DMM, oscilloscope and datalogger. It provides an easy-to-use interface, with all sourcing and measuring functions available from the USB interface.

JKI precision power modules provide precise control and measurements in the mA and microampere region with the ability to simultaneously digitize voltage and current. Analyze captured voltage and current measurements over time like an oscilloscope.

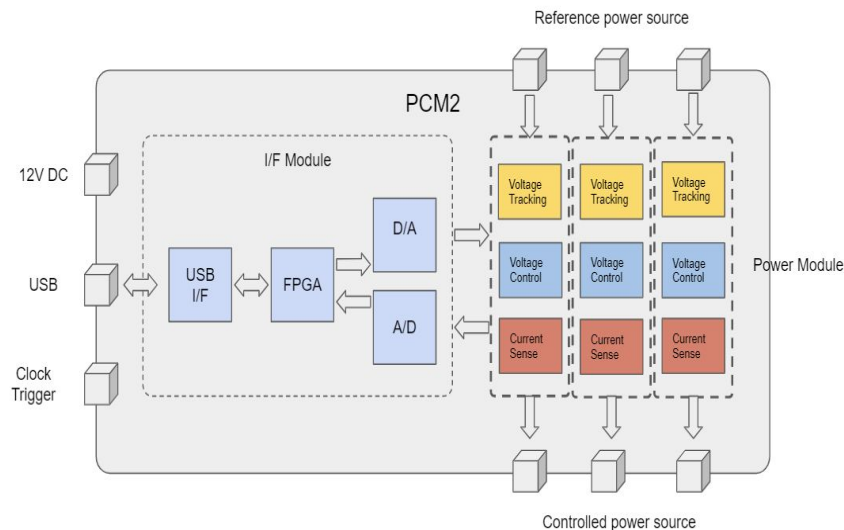


Features & Advantages

- Ideal for R&D testing and design validation
- Sources and measures DC voltage and current into your device under test (DUT)
- Combines up to three DC power supplies, DMM, oscilloscope and data logger in one integrated instrument
- Log data for seconds, minutes, hours, or even days to see current/power consumption or capture anomalies
- Track input reference voltage to source voltage and current into DUT with same level and adding offset voltage
- Connect via USB 3.0
- Software supports via GUI & CLI mode

Applications

- Engineering test solution for high-speed DDR NAND devices

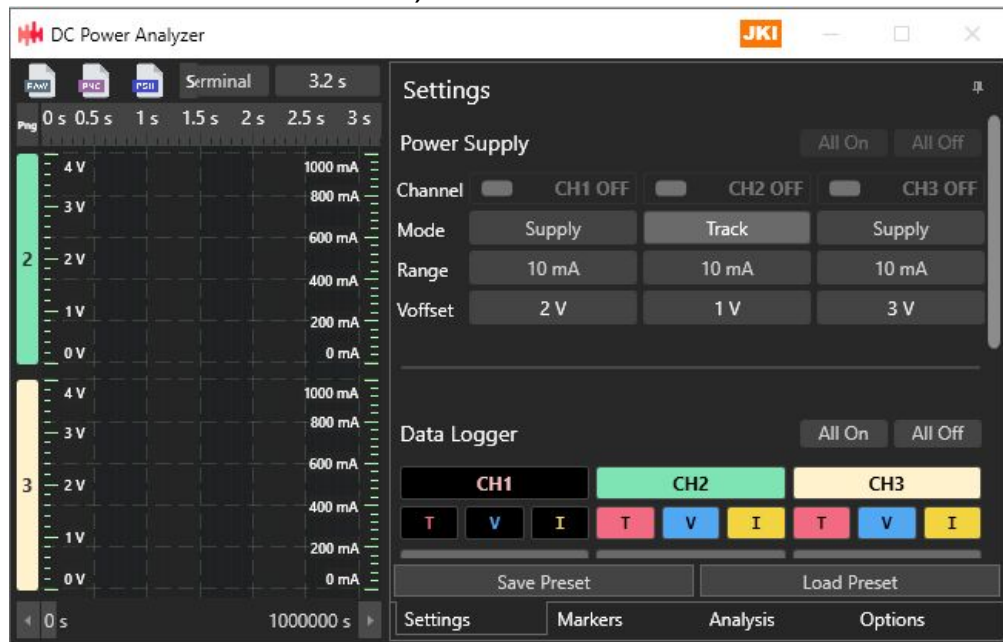


PCM2 Specifications

Track Voltage Range	0 ~ 3.6 V
Output Voltage Range	0.2 ~ 3.6 V
Max. Output Current	~ 1 A
Ripple & noise (p-p / rms)	10 mV / 2mV
Voltage Programming Resolution	76.294 μ V
Voltage Measurement Resolution	38.146 μ V
Current Measurement Resolution	22.89 μ A (@1A Range) 228.9 nA (@10mA Range)
Voltage Programming Accuracy	0.1% + 5 mV
Voltage Measurement Accuracy	0.1% + 5 mV
Current Measurement Accuracy	0.2% + 400 μ A (@1A Range) 0.2% + 40 μ A (@10mA Range)
Load Regulation	40mV (@600mA Transient Response)
External Trigger IN (SMA Port)	0.8V (VIL Max) / 2.0V (VIH Min)
External Trigger OUT (SMA Port)	0.4V (VOL Max) / 2.9V (VOH Min)

Software Architecture

Host Program
(Windows GUI based
Test Automation Studio)



Target Program
(Embedded Linux based
Test Pattern Programming)

Pattern Programming & Verification

Test Pattern & Timing Sets

```
api->PG.Add(tset.Select);
api->PG.AddWriteData(tset.Command, 0xA2);
api->PG.AddWriteData(tset.Command, 0x80);
api->PG.AddWriteData(tset.Address, ColAddress_1st);
api->PG.AddWriteData(tset.Address, ColAddress_2nd);
api->PG.AddWriteData(tset.Address, RowAddress_1st);
api->PG.AddWriteData(tset.Address, RowAddress_2nd);
api->PG.AddWriteData(tset.Address, RowAddress_3rd);
api->PG.Add(tset.WrPre);
api->PG.AddWriteDBM(tset.WrDbm8B, 8, length / 8, DBM_Address);
api->PG.Add(tset.WrPostToCmd);
api->PG.AddWriteData(tset.Command, 0x10);
api->PG.AddBusy(tset.WaitReady);
api->PG.Add(tset.Deselect);
```

```
//-----
// Command latch cycle
//-----

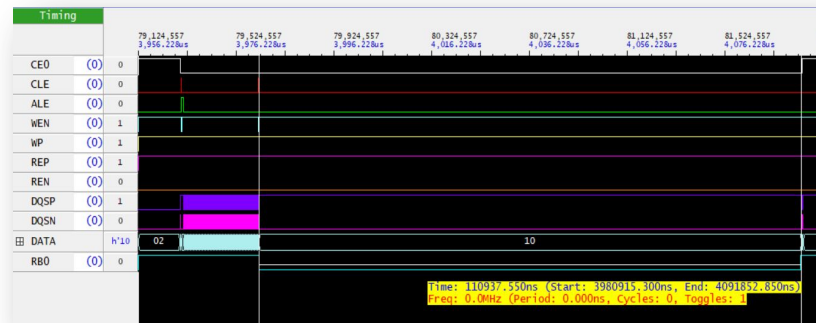
double tS_max = std::max({tWP, tCAS});
double tH_max = std::max({tCALH, tCAH});
rate = tS_max + tH_max;

api->TG.SetTime(tset.Command, PinNum::CEN, {{P, 0}, {P, rate}});
api->TG.SetTime(tset.Command, PinNum::CLE, {{H, tS_max - tCAS}, {P, rate}});
api->TG.SetTime(tset.Command, PinNum::ALE, {{L, tS_max - tCAS}, {P, rate}});
api->TG.SetTime(tset.Command, PinNum::WEN, {{L, tS_max - tWP}, {H, tS_max}, {P, rate}});
api->TG.SetTime(tset.Command, PinNum::REN, {{H, 0}, {P, rate}});
api->TG.SetTime(tset.Command, PinNum::WPN, {{H, 0}, {P, rate}});
api->TG.SetTime(tset.Command, PinNum::RX_STRB, {{L, 0}, {P, rate}});
api->TG.SetTime(tset.Command, PinNum::RX_RST, {{L, 0}, {P, rate}});
api->TG.SetTime(tset.Command, PinNum::TX_CMD, {{L, 0}, {E, tS_max - tCAS}, {P, rate}});
api->TG.SetTime(tset.Command, PinNum::TX_DATA, {{L, 0}, {P, rate}});
api->TG.SetTime(tset.Command, PinNum::TX_DQS, {{H, 0}, {P, rate}});
api->TG.SetTime(tset.Command, PinNum::DQ_DIR, {{L, 0}, {P, rate}});
```

Pattern Simulation



Logic Analyzer



Contact Us

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CEO JK Kang
Established Jul, 2012
Business Area Design and fabrication of test systems

Products and Services

Trace Solutions

DDR3/4/5, LPDDR3/4/5, GDDR5/6
NAND, eMMC, MCP, etc.

Test Solutions

High-Speed Engineering Tester for DDR/NAND
High-Speed Burn-In Tester for DDR/NAND

Connect Solutions

High-Speed Interposers for AP + Memory
High-Speed Socket for DDR/NAND

Design Services

High-Speed Digital System Design
High-Speed Test & Measurement Solution

Contact

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 *connect*

 *test*

 *trace*

 *verify*