

DxV Test System

Changes the Rules of Design through Production Test



Automotive



Mobility



IoT/IoV & Optoelectronics



Computing & Network



Industrial & Medical



Consumer

Productivity

- High density instrumentation delivers over 1000 pin resources for high volume production needs
- 5 instrument slots configurable with a range of Cohu Diamondx instruments
- Post silicon validation and evaluation
- Engineering samples or quality testing and analysis
- Links to 3rd party software and hardware development tools
- System level calibration and diagnostics

Key Features

- PCI-Express2 Data Bus up to 80 Gbps bi-directional transfer between system CPU and test head
- Workstation fully integrated into test head
- Air cooled with low ambient noise for office environments
- Portability using castors or light-weight manipulator
- IoT and sensor device testing
- High throughput wafer and WLCSP test applications

- Full ATE performance in a desktop PC footprint
- Ideal for lab development and high-volume production
- No mainframe, separate workstation or support cabinet needed
- Completely standalone system
- Energy efficient, low power consumption
- Ultra compact, zero footprint test floor impact when docked to handlers

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Instrumentation

Automotive

ATMPx: Analog time measurement processor

- Flexible timing measurements through per-pin programmable comparator levels and programmable hysteresis
- Reduced loadboard complexity using the SmartMux for high voltage timing measurements

DC and Power

DPS16: 16-channel device power supply

- Continuous voltage source
- Voltage and current measurement

DPS1x: High-performance device power supply

- Multisite testing of multi-core application processors and other high current, low voltage devices
- Drop-in replacement for DPS16 with enhanced capabilities

HDVI: High-density voltage current for massive multisite test

- Highest V/I pin density in the industry
- Voltage/current supply (VIS) mode
- Precision analog source (PAS) mode
- Flexible triggering options
- External input matrix

PD2x: Test solution for ultra-high definition display driver ICs

- Integrated display drivers for mobile and tablet applications, including touch and display driver integration (TDDI)
- Large panel television and monitor applications, including ultra-high definition and 240 Hz refresh rate
- Extended range selection
- 128k capture memory per channel
- Industrial and automotive display drivers

PMVIx: Voltage/current source for mobile, power management, SoC, automotive and MCU ICs

- 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

VI16: Precision voltage/current and measurement with advanced features

- V/I source mode
- AWG and digitizer functions
- Time measurements
- Differential voltage measurement
- Timers, triggers and gates
- Alarms

Digital

DPIN-g6: High-value solution for testing digital

- Flexible timing
- Reconfigurable pattern memory
- Deep capture memory
- High-precision PMU
- Built-in time measurement
- Super voltage
- Comprehensive software tools

GX1x: General purpose digital

- Flexible pattern memory allocations
- Multiple pattern generation
- Transmit and receive of digitized waveforms
- Pattern synchronization and control of DC and AC analog test instruments

HSI1x/HSI2x: SerDes/LVDS/MIPI

- Physical layer testing with built in PRBS BERT TX/RX
- BIST/DFT testing using high bandwidth drive/compare memory
- Protocol level and mixed-signal testing using deep send pattern memory

HSIO 8 lane SerDes for high-speed serial interfaces

- 8 Tx, 8 Rx
- 6.4 Gb Data Rate
- 128M Vector Memory
- Jitter Injection
- Eye Mask, PRBS

MP1x: LVDS port and DDR memory port test

- Matching the interface structure and requirements of a DDR memory controller for simplified DUT boards
- Supporting built-in memory protocol support
- Same cycle match capability to support for data latency of up to 8 cycles

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Mixed Signal and DSP

Multi-wave: Highly integrated mixed-signal instrument for multisite and concurrent test

- Wide bandwidth analog source and capture
- Flexible triggering
- High-precision PMU
- Protected I/O channels
- Simpler test boards
- Mixed-signal software support

Software

Test Software Environment

- Unison OS offering a complete suite of test software tools including scan test, concurrent test, multi-site setup and system level calibration and diagnostics

Work Station

- Separate workstation is not required

System DUT Utility Resources

SDU

- Loadboard power supplies
- User control bits (128)
- Reference clock
- Serial and parallel control buses

Specifications

Instrument Slots

- 5 instruments slots in a single test head

Digital Pin Count

- >1,0000

Multisite Test Sites

- Up to 1024

Thermal Management

- Air cooled

Prober and Handler Interfaces

- GPIB, TTL, RS-232, Ethernet

Dimensions

- 7" W x 14" D x 25" H (22 cm x 26 cm x 64 cm)

Weight

- 50 lbs (25 kg) for basic systems (excluding Loadboard, docking)

Facilities Requirements

- Electrical: 200 - 240 V, single phase
- Ethernet: required
- Other: no compressed air or chilled water required

Specifications subject to change without notice.
For detailed performance specifications, please contact Cohu.