

Co-Optive DC Parametric Test

HiLevel's DC³ test system is much more than a high-precision DC parametric measurement unit. By design, it can be integrated with your own logic stimulus equipment to perform DC output tests such as VOH and IOL, providing this capability with high pincount at the lowest cost. And for devices requiring DC and Continuity test capability only, the DC³ is a very cost-effective Production Test solution. Now you can provide your own logic test resources running in co-optive partnership with a high-precision MultiSite system for low-cost test. Contact HILEVEL to learn more.







Co-Optive DC³ Test



Price and Performance

The flexibility of a *HILEVEL* system brings new price/performance efficiency to the Tester-in-a-Head tradition, a concept created and introduced by *HILEVEL* in 1987. This tester is a superior cost-effective solution for DC test, especially in conjunction with the user's external logic sources. *HILEVEL*'s own proprietary tester ASICs provide the power and versatility so crucial in a Production Test system.

Multi-Site

Each DC PEB card provides DC test for 128 pins. The *HILEVEL* DC³ chassis has slots for 16 DC boards (Up to 64 sites of 32 DC pins each). Available in two configurations of either 1,024 or 2,048 pins in a single chassis. Software assigns the desired number of sites among these boards; all pins in one site, or divide the pins into two sites, four sites, etc. The DC³ system can provide internal power supplies for each site in the Multi-site mode.





Rich in GUI functions for engineering, and all the capabilities that make a mass production tester fast, HILEVEL's new Symphony III software provides the tools for efficient test development.





Specifications

MAINFRAME

Maximum DC Pins (16 slots)

Up to 2,048 DC pins in increments of 128 pins (128 pins per slot).

Maximum sites: 64

OTHER SLOTS

System Basic Boards (2 slots)

CRC Communications and Control PMP Calibration and Supplies

WORKSTATION AND SOFTWARE

OS: Windows 7

Automation: ACT (Automation C Tools),

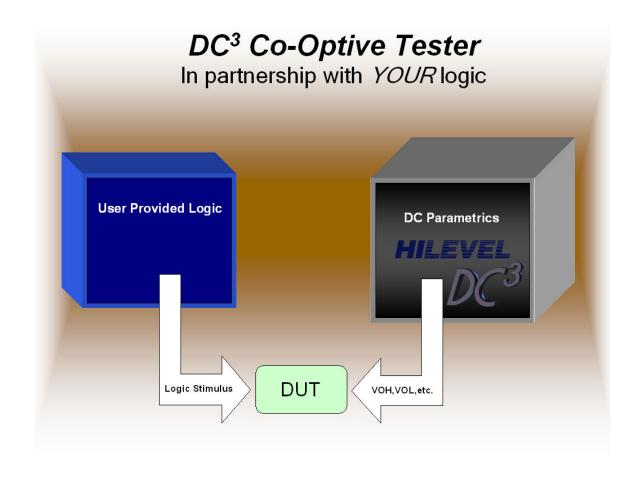
TexTest for ASCII test control,

or HILEVEL AutoTest (GUI)

Controller: PC workstation, Windows 7,

and HILEVEL Symphony III software

Interface: USB 2







Specifications

DC PIN RESOURCES

DC Drive Range: 0-5V Resolution: 20mV

Current: Sink/Source ±10mA

All measurements referenced to DUT ground.

DC PARAMETRIC MEASUREMENTS

One DCPMU per 32 pins (4 per DC card)

Force Voltage Range: -8V to +8V Voltage Measurement Range: -8V to +8V

Resolution: 1 mV Accuracy: $0.2\% \pm 2 \text{mV}$

Force Current Range: -150 mA to +150 mA Current Measurement Range: ± 150 mA Resolution & Accuracy: Range Dependent Resolution & Accuracy: Range Dependent

Current Ranges	Resolution	Accuracy
± 200 nA	10 pA	\pm 0.4% of Value + 40 pA
± 2 μA	100 pA	\pm 0.3% of Value + 400 pA
$\pm 20 \mu A$	1 nA	\pm 0.2% of Value + 4 nA
$\pm 200 \mu\text{A}$	10 nA	\pm 0.2% of Value + 40 nA
$\pm 2 \text{ mA}$	100 nA	\pm 0.2% of Value + 400 nA
± 20 mA	1 μΑ	\pm 0.3% of Value + 4 μ A
± 150 mA	10 μΑ	$\pm 0.4\%$ of Value $+ 40 \mu A$

ENVIRONMENTAL

Power

220VAC single phase, Max 20A

Max Weight

85kg approx. (16 cards installed) Manipulator Adapter Option: 10kg

Dimensions (Test head only)

H508mm x W438mm x D438mm

Mounting

Standard 19" rackmount

Cooling

9 fans

Temperature

60 to 80 °F (16 to 27°C)

TEST CAPABILITY

Stand-Alone

Continuity
Opens/Shorts

Leakage

With User-Provided Stimulus

VOH/VOL

IOH/IOL

(Plus all Stand-Alone listed above)





Specifications

MAIN DUT POWER SUPPLIES

PS₁

Range: 0 to 8V, 0 to 2A Resolution: 5mV, 10mA Accuracy: +/-15mV

PS2 & PS3

Range: +/-16V, 0 to 1A Resolution: 5mV, 10mA Accuracy: +/-15mV

PS4

Range: 0 to 3.7V, 0 to 4A Resolution: 5mV, 10mA Accuracy: +/-10mV

Current Measurement Resolution

Range dependent. Best resolution is 1 nA.

Multi-Site Supplies

One Supply per each 32 Pins (site)

Voltage Range: 0-8V Resolution: 5mV Accuracy: 15mV Current Range: 0-1A Resolution: 10mA

Accuracy: see table below

DUT SUPPLY MEASUREMENT RANGES

One Measurement Unit per system

Voltage Measurement Range: -16V to +16V, Resolution: 5mV, Accuracy: 0.2% ± 2mV

Current Ranges	Resolution	Accuracy
± 200 nA	10 pA	\pm 0.5% of Value + 100 pA
$\pm 2 \mu A$	100 pA	\pm 0.4% of Value + 500 pA
$\pm 20 \mu A$	1 nA	\pm 0.2% of Value + 4 nA
± 200 μA	10 nA	\pm 0.2% of Value + 40 nA
$\pm 2 \text{ mA}$	100 nA	\pm 0.2% of Value + 400 nA
± 20 mA	1 μΑ	\pm 0.4% of Value + 4 μ A
± 200 mA	10 μΑ	\pm 0.4% of Value + 40 μ A
± 2 A	100 μΑ	\pm 0.5% of Value + 400 μ A
± 5 A	250 μΑ	\pm 0.5% of Value + 1 mA

So-Optive



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