Automated test solutions for the entire product lifecycle

cUTS 2.0

Functional test, simplified

Sometimes functional test does not require a big fancy test rack – but your operation needs test solutions that can scale. That's why BLOOMY® created the compactUTS™ (cUTS) functional test platform. Packing all the functionality you'll need for automatically testing simple PCBAs, subassemblies and products, you can use our powerful Universal Test System LabVIEW/TestStand software suite to develop test programs that execute on your PC. Or, have us create a turnkey cUTS hardware/software solution, we are experts in functional test!

Built around precision NI DAQ and DMM instrumentation and our own switch matrix and power control, you can connect up to 50 testpoints to your device through a robust VPC i1 mass-interconnect. The cUTS can automatically test many different mixed-signal electronic devices by employing unit under test (UUT)-specific cables that trigger the system to run associated test procedures.

Does your test program require a different set of instrumentation or interconnect?

Inquire about BLOOMY's UTS, midUTS 3.0, as well as custom turnkey test systems.

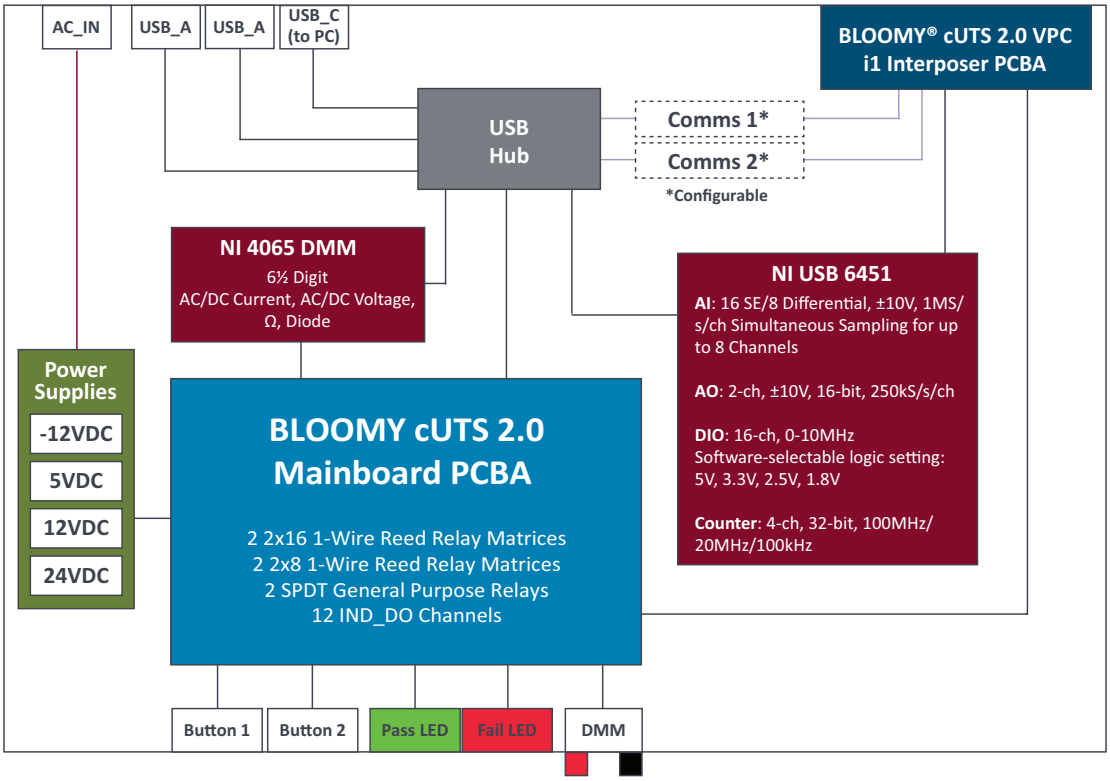
APPLICATIONS

- PCBA Functional Test
- Subassembly Functional Test
- Electronic Product Test

FEATURES

- Bench top or rack mount form factor
- USB controlled
- 6½ Digit DMM
- Multifunction DAQ (16 AI, 2AO, 8 TTL DIO)
- Flexible switch matrix
- Reliable VPC i1 interface
- 4 fixed power supplies
- Two general purpose relays
- Serial communications
- Manual DMM Probes
- Two operator switches
- Pass and fail indicators
- LabVIEW drivers
- UTS Software Suite available
- All components RoHS and REACH compliant

BLOCK DIAGRAM



HARDWARE SPECIFICATIONS

INSTRUMENTATION	
NI USB-4065 Digital Multi Meter (DMM)	
Resolution	6½ digit, 22-bit
Functions	VDC, IDC, VAC, IAC, 2- or 4-wire resistance
NI USB-6451 Data Acquisition	
Analog Input	16 SE / 8 differential, 20-bit, ±10V, 1MS/s/ch
Analog Output	2-ch, ±10V, 16-bit, 250kS/s/ch
Digital I/O	16-ch, TTL, bi-directional, 0-10MHz
Counter/Timer	4-ch, 32-bit, 100MHz/20MHz/100kHZ
Mux / Matrix Switching	
Topologies	2 2x16 1-wire matrix 2 2x8 1-wire matrix
Switch Ratings	200VDC, 1A, 15W max.
General Purpose Relays	
Relay Configuration	2 SPDT, 30VDC @ 5A
Fixed Power Supplies	
Quantity	4
Power Options	5, ±12, 24VDC; up to 5A each
Control	Independent enable relays

COMMUNICATIONS	
Number of Ports	2
Port Options	RS-232, RS-422/485, CAN, SPI, I2C
INTERFACES	
Mass Interconnect	VPC i1, 160 pin
Programmable Indicators	1 red LED 1 green LED
Programmable Pushbuttons	2x momentary
Manual Probes	External DMM banana jacks
USB	1x USB-C 2x USB-A
Grounding	ESD wrist strap
PHYSICAL & POWER	
Input Power	120VAC 60Hz, 5A
Dimensions	19”W x 20”D x 3.5”H
Weight	25 lbs
SOFTWARE	
Software Interface	LabVIEW Drivers UTS Software Suite available

Platinum Partner

Call 860-298-9925 or visit www.bloomy.com

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