compactUTS

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.

APPLICATIONS

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

FEATURES

- Bench-top form factor
- USB controlled
- 6½ Digit DMM
- Multifunction DAQ (16 AI, 2AO, 8 TTL DIO)
- Flexible switch matrix
- Reliable VPC i1 interface
- Up to three 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

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

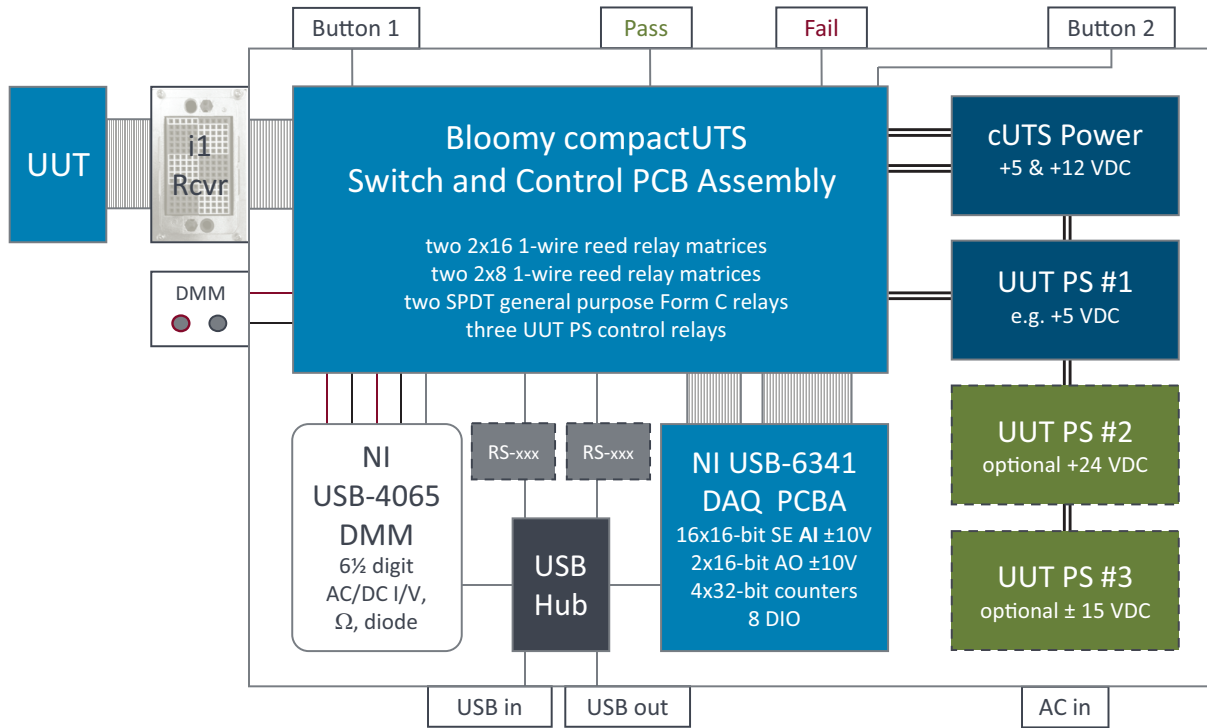Inquire about Bloomy's UTS, midUTS, extended®UTS, as well as custom turnkey test systems.

BROAD TEST FUNCTIONALITY

| Button 1 | Pass | Fail | Button 2 |

UUT — **i1 Rcvr**

Bloomy compactUTS Switch and Control PCB Assembly
two 2x16 1-wire reed relay matrices
two 2x8 1-wire reed relay matrices
two SPDT general purpose Form C relays
three UUT PS control relays

cUTS Power +5 & +12 VDC

UUT PS #1 e.g. +5 VDC

UUT PS #2 optional +24 VDC

UUT PS #3 optional ± 15 VDC

DMM

NI USB-4065 DMM 6½ digit AC/DC I/V, Ω, diode

RS-xxx   RS-xxx

USB Hub

NI USB-6341 DAQ PCBA 16x16-bit SE AI ±10V 2x16-bit AO ±10V 4x32-bit counters 8 DIO

| USB in | USB out | AC in |

HARDWARE SPECIFICATIONS

INSTRUMENTATION

NI USB-4065 Digital Multi Meter (DMM)

Resolution	6 ½ digit, 22-bit
Functions	VDC, IDC, VAC, IAC, 2- or 4-wire resistance

NI USB-6341 X-Series Data Acquisition

Analog Input	16 SE / 8 differential ±10V, 16-bit, 500kS/s
Analog Output	2 SE ±10V, 16-bit, 900kS/s
Digital I/O	8-ch, TTL, bi-directional, 1MHz
Counter/Timer	4-ch, TTL, 100MHz

Mux / Matrix Switching

Topologies	Two 2x16 1-wire matrix Two 2x8 1-wire matrix
Switch Ratings	37 VDC, 0.5A; 10W max., 1MHz bandwidth

General Purpose Relays

Relay Configuration	Two SPDT, 30VDC @ 5A

Fixed Power Supplies

Quantity	Up to 3
Power Options	5, 12, ±15, 24; 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-B In (control) 1x USB-A Out
Grounding	USB wrist strap

PHYSICAL & POWER

Input Power	120VAC 60Hz, 5A
Dimensions	20" W x 16.25" D x 4.25" 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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