



The Leader in Automated Test, Data Acquisition and Control Systems

UTS



### *functional test, universalized.*

Electronics manufacturing requires reliable yet affordable mixed-signal functional test. Bloomy created the UTS, an ideal platform for testing mixed-signal PCBA, subassembly and small products in low- to mid-volume, high-mix production environments. Powered by NI PXI instrumentation, a robust VPC G12 mass interconnect receiver and our own power control technology, the UTS executes automated test procedures developed with our Universal Test System software suite of NI TestStand and LabVIEW modules.

Appropriate instrumentation for your device's needs is easy to add to the system in the form of PXI cards and/or 19" rack modules. Bloomy can also provide test fixtures and full test procedure and software development for your project.

### APPLICATIONS

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

### FEATURES

- Mixed-signal functional tester
- 19U, 19 inch rack with casters, dimensions: 22" W x 32" D x 46" H
- Precision NI PXI instrumentation
- VPC G12 mass interconnect receiver
- Rack keyboard/mouse
- 22" touchscreen monitor on adjustable arm
- 120VAC power distribution with breakered unswitched, switched, and E-stop safety switch enabled outlets
- Optional uninterruptable power supply
- Optional high voltage safety circuits

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

Inquire about Bloomy's compactUTS, extendedUTS, as well as custom turnkey test systems.

## G12 MASS INTERCONNECT COMPATIBLE FIXTURES

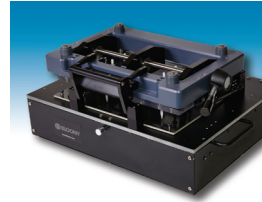
Your device under test deserves the most robust and reliable connections. Test fixtures provide the UTS to DUT interconnect using cables, bed of nails, or both. Mating with the G12 mass interconnect is an Interface Test Adapter (ITA) packed with high density connector modules that route signals to and from PXI instrumentation in the UTS base. You can create your own fixtures, or take advantage of our vast fixture-design experience. Self-test fixtures are also available that exercise all of the instrumentation up to the mass interconnect, assuring the proper operation of your UTS.



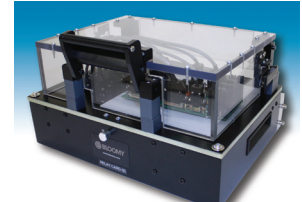
SELF TEST



CABLED



BED OF NAILS



HV SAFETY

## HARDWARE SPECIFICATIONS

INSTRUMENTATION	
<b>NI PXI-4065 Digital Multi Meter (DMM)</b>	
Resolution	6 ½ digit, 22-bit
Functions	VDC, IDC, VAC, IAC, 2- & 4-wire resistance
<b>NI PXI-6221 Multifunction Data Acquisition</b>	
Analog Input	16 SE / 8 differential ±10V, 16-bit, 250kS/s
Analog Output	2 SE ±10V, 16-bit, 740kS/s
Digital I/O	24-ch, bi-directional, 1MHz
Counter/Timer	2-ch, TTL, 80MHz
<b>NI PXI-2530B 128-Channel Multiconfiguration Multiplexer/Matrix Switch</b>	
Matrix Configuration	4x32 (1-wire), 8x16 (1-wire), and 4x16 (2-wire)
Multiplexer Configuration	128x1 (1-wire), 64x1 (2-wire), 32x1 (4-wire), 8 banks of 16x1 (1-wire)
Relay Type	Reed
Switch Ratings	900 ch/s maximum switching speed 60 VDC or 30 Vrms, 400mA
<b>NI PXI-6515 Low-Cost Industrial I/O</b>	
Logic Level	24V
Input Channels	32
Input Type	Sinking Sourcing
Input Voltage Range	-30V – 30V
Output Channels	32
Output Type	Sinking
Output Current Drive	475 mA (one channel), 125 mA (all channels)
<b>NI PXI-4110 Triple-Output Programmable DC Power Supply</b>	
Output Channels	3
Max Voltage Range	0 to 6V, -20 to 0V, 0 to +20V
Min Voltage Range Sensitivity	0.12 mV
Max Current Range	1A

COMPUTER SYSTEM	
<b>NI PXIE-1078 Chassis</b>	
Number of Slots	9
PXI Express Slots	3
Hybrid Slots	5
Max System Bandwidth	1.75 GB/s
<b>NI PXIe-8840 PXI Express Controller</b>	
Processor	2.6 GHz quad-core Intel Core i7-5700EQ
Standard Memory	4 GB (up to 8 GB)
Peripherals	2 Gigabit Ethernet, 2 USB 3.0, 4 USB 2.0, ExpressCard (optional)
<b>Windows 7 Operating System</b>	
INTERFACES	
Mass Interconnect	Standard VPC G12 Modules for all instruments Bloomy Comms Module USB, Enet, 2x DB9, DMM, GPIO
Grounding	USB wrist strap
PHYSICAL & POWER	
Dimensions	22" W x 32" D x 46" H
Monitor Arm	Adjustable extension capability 16" to 20" H
Weight	350 lbs
Input Power	110VAC 60Hz, 5A
SOFTWARE	
<b>NI TestStand Base Deployment Engine</b>	
<b>Bloomy UTS Software Suite</b>	
Operator Interface	Configuration, debugging capabilities, fixture auto detection, data logging and user management
Hardware Access Framework	Hardware abstraction layer, TestStand Custom Step Types and support for common hardware
SQL Database Plugin	Log TestStand results to SQL database View, query, filter, and export results



Call 860-298-9925 or visit  
[www.bloomy.com](http://www.bloomy.com)