



# Agilent's Power and Data Bus Test System

## Z2090B-033 System Overview

### Satellite Bus testing solution from Agilent

#### System Description

The Power and Data Bus System consists of hardware to provide command and telemetry signals, bit error rate testing, DC power interface, data storage and standard RS485 and IEEE 1553 signal interfaces for satellite panel and unit testing.



Example system rack configuration

#### System Capability

- Multiple channels RS422 IO
- Four redundant channels MIL-STD-1553B separately configurable as BC, RT, or BM
- CMD and TLM processor with MYK 16/17 Crypto Control and Status and TX/RX Ternary Command BERT
- 12 channel RS422, 2 channel MIL-STD-1553B data recording
- General purpose relay switching
- General purpose relay driving
- High Voltage Analog Inputs (100 V)
- 120 V, 200 A Dynamic Loads
- 40 V, 125 A Power Supplies
- 4-channel oscilloscope
- Redundant power supply bus protection and monitoring

#### Agilent will tailor the system to specific customer needs

Any test system is only as good as its capability to test the specific UUT. Agilent has the expertise, resources and processes in place to match the system to your needs. Our experience along with that of selected partners will ensure that your testing needs are fully met in a cost competitive manner.

#### System hardware

- RS422 IO
- MIL-STD-1553B I/O
- CMD/TLM Processor
- RS422/1553B Data Recorder
- 18 slot PXI chassis
- 16x32 two-wire crosspoint mux
- Bus Protection Unit
- Power Supplies
- Dynamic Loads
- Relay Switches
- Relay Drivers
- HV Analog Inputs
- Oscilloscope
- System rack, cabling, controller PC

#### Rack hardware

- Agilent 1.6 meter or 3rd party ruggedized rack, PDU and cooling.

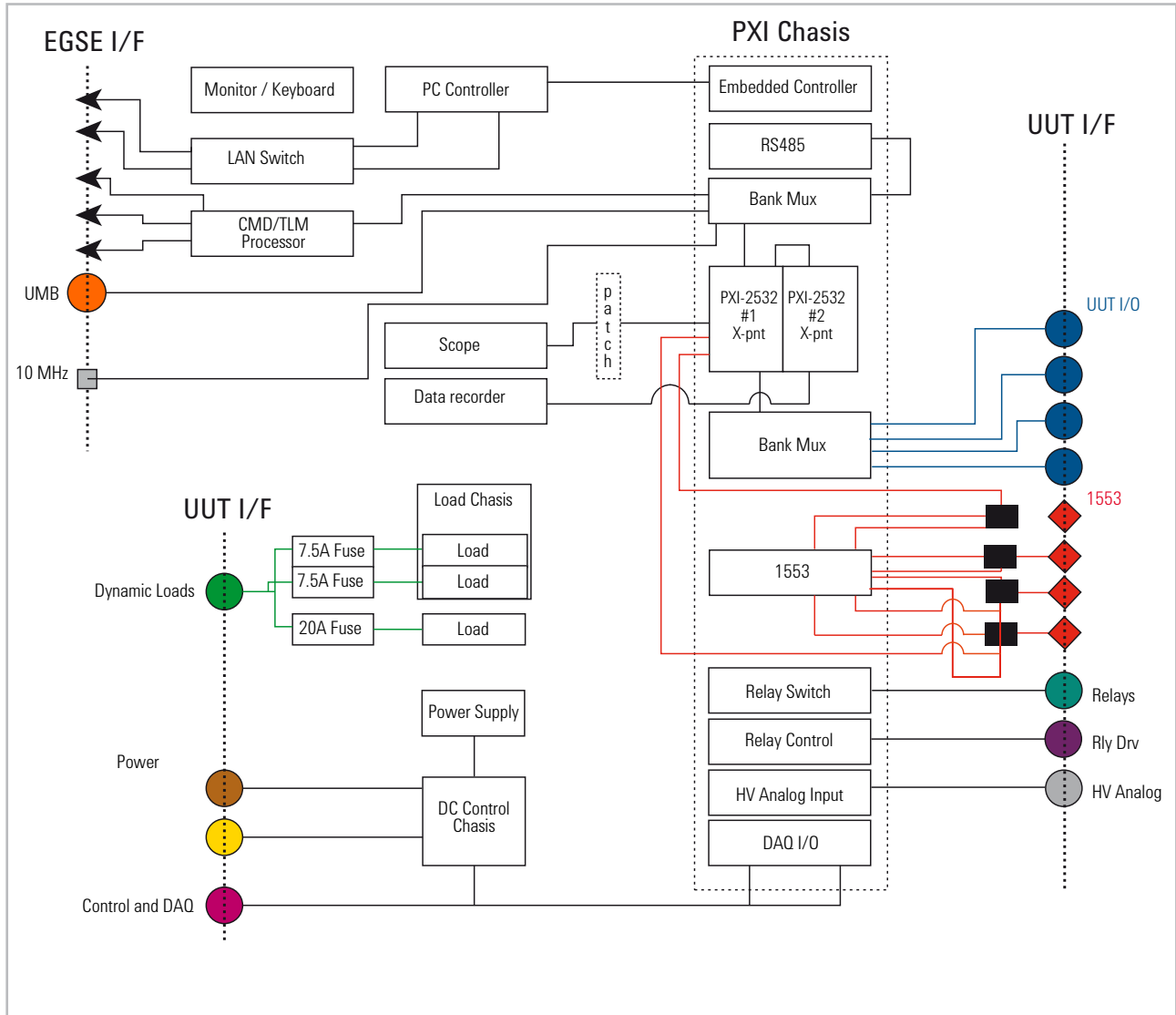
#### System software

The system comes with standard Agilent instrument drivers, measurement firmware depending on instrument options selected, Win XP Pro™ operating system, and Norton Ghost™.



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# System Block Diagram



## System Benefits

- This system solution provides a single part number with capability to supply stimulus, power and measurements for satellite bus testing.
- PDTS is a platform solution that can be customized to specific requirements. For example, it can be customized to add other protocols such as Spacewire. It has a PXI chassis with room for expanding and adding other functionality as needed.

## Application Assistance

Agilent's application experts are available to help optimize the system, taking full advantage of the system capability for your unique application. Operator training is also available to help you get the system into service quickly.

If your application goes beyond the standard system offering described above, Agilent program managers and engineering professionals can help define and implement unique functionality. They ensure that your custom system requirements are implemented successfully.

## Warranty & Support

Agilent provides a 1-year return-to-Agilent warranty on custom systems. Warranty extensions and custom repair strategies are available to meet your specific requirements.

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