

# ProDAQ VXI Data Acquisition Systems

## ProDAQ 3080 Gigabit Ethernet VXIbus Interface

### OVERVIEW

The ProDAQ 3080 VXIbus Gigabit Ethernet slot-0 interface provides access to VXIbus instruments through a standard Gigabit Ethernet interface using the VXI-11 protocol. It is designed to function as a bridge between the established, time-tested, proven base of VXIbus instruments and the Ethernet, allowing users to build any size of test and measurement system simply by connecting the instruments via standard LAN to a computer.

#### VXIbus Interface

The ProDAQ 3080 utilizes the Tundra Tsi148 bridge to support the 2eVME block transfers specified in the revision 3.0 of the VXI standard in addition to all standard transfer modes. This allows for high-speed data transfers of up to 50 MB/s using block transfer modes while maintaining backward compatibility with existing VXI rev. 1.3, 1.4 and 2.0 instruments. Optimized for low first-word latency, the ProDAQ 3080 is able to achieve a first-word latency of app. 120  $\mu$ sec using standard Ethernet infrastructure.

#### Software Interface

The ProDAQ 3080 is fully compliant to the VXIplug&play standard. Access to the ProDAQ 3080 and the VXIbus instruments are provided through a standard VISA library. This allows for backward compatibility with existing VXIplug&play drivers and application software.

The VXIbus resource manager is embedded in the ProDAQ 3080 firmware and automatically executed at power-up. The embedded WEB interface allows users to configure and control the ProDAQ 3080 VXIbus Gigabit Ethernet slot-0 interface and provides access to the VXIbus instruments via a standard WEB browser.



### Features & Benefits

- ▶ **Gigabit Ethernet VXIbus interface** using standard VXI-11 protocol
- ▶ Up to **50 MB/s block transfer** rates
- ▶ **Support for 2eVME block transfers** introduced in VXI Standard Rev. 3.0
- ▶ Access and configuration via the **embedded Web interface**
- ▶ Standard software interfaces for **easy integration**

For more information,  
visit [www.bustec.com](http://www.bustec.com).

Learn more about the  
**ProDAQ 3080** on our website  
by scanning the code below.





## SPECIFICATIONS

### ETHERNET INTERFACE

Type	10/100/1000 BASE-TX
Connector	RJ-45
Protocols	TCP/IP, HTTP, VXI-11

### DEVICE TYPE

Register-based VXIbus slot-0 controller

### SLOT-0 CAPABILITIES

Automatic slot-0/non-slot-0 detection with full MODID/CLK 10 support if in slot 0

### VXIBUS INTERFACE

Address Ranges	A16, A24, and A32
Data Transfer	D08, D16, D16BLT, D32, D32BLT, D64MBLT, 2eVME
Interrupt Cap.	Interrupter/Handler, IRQ 1-7
Trigger Lines	VXIbus TTL Trigger 0-7, VXIbus ECL Trigger 0-1

### FRONT PANEL I/O

Trigger Input	TTL level, active edge software selectable (Can be routed to VXIbus TTL and ECL trigger lines)
Trigger Output	TTL level, active level software selectable (Can be driven by VXIbus TTL and ECL trigger lines)
CLK10 I/O	TTL level

### POWER REQUIREMENTS

Current Consumption	Voltage (V)	Current (mA)
	+24	80
	+12	15
	+5	5600
	-2	50
	-5.2	150
	-12	10
	-24	0
Power Consumption	< 31.1 W	

### SHOCK AND VIBRATION

Functional Shock	30g peak, half-sine, 11 ms pulse (Test performed in accordance to IEC 60068-2-27 and MIL-T-28800E Class 3)
Random Vibration	5 to 500 Hz, 0.3g <sub>RMS</sub> operational 5 to 500 Hz, 2.4g <sub>RMS</sub> non-operational (In accordance with IEC 60068-2-64 and MIL-T-28800E / MIL-STD-810E Meth. 514)

### PHYSICAL CHARACTERISTICS

Dimensions	VXIbus single slot C-size module
Weight	1150 g

### ENVIRONMENTAL

Temperature	0°C to +50°C (operational) -40°C to +70°C (storage only)
Humidity	10% - 90% (non-condensing)

### SOFTWARE SUPPORT

VXIplug&play compatible VISA library for Microsoft Windows  
(Contact Bustec Ltd. for more information)

### WARRANTY PERIOD

12 months (extended periods available at additional cost)

## Ordering Information

- ▶ **3080-AA** Gigabit Ethernet VXIbus interface
- ▶ **3080-BA** Gigabit Ethernet VXIbus interface, 2 Ethernet Ports

### Related Products

- ▶ **3180-AA** Ultra-performance motherboard module
- ▶ **3416-xx** 16-ch, 24-bit, sigma-delta ADC function card
- ▶ **3424-xx** 8-ch, 24-bit, sigma-delta ADC function card
- ▶ **3430-xx** 4-ch, sigma-delta ADC function card
- ▶ **3510-xx** 16-ch DAC function card
- ▶ **3550-xx** 2-ch, fast DAC arbitrary waveform generator
- ▶ **3610-Ax** 48-ch DIO function card
- ▶ **3808-AA** 8-ch, 100 MHz counter/timer/frequency meter function card

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