

Message Based VXI – VX4801



OVERVIEW

Tektronix has chosen to exit the VXI module market. This has caused some concern with users who have Tektronix modules running in systems which still have to be maintained for some indefinite future period. ASCOR, drawing on its 15 years of producing general purpose VXI modules, has decided to provide functionally equivalent replacements for a number of Tektronix modules.

However ASCOR's new Message Based unit goes beyond functional equivalence. It is fully hardware and software compatible with existing systems, having been tested and qualified as a true 'drop-in' replacement to the Tektronix unit.

COMPATIBILITY

HARDWARE

The front panels have the same connectors with the same signals appearing on the same pins as the original Tektronix modules. No adaptor cables or cross-reference charts are needed. Just disconnect the cables from the Tektronix unit and connect to ASCOR's unit.

SOFTWARE

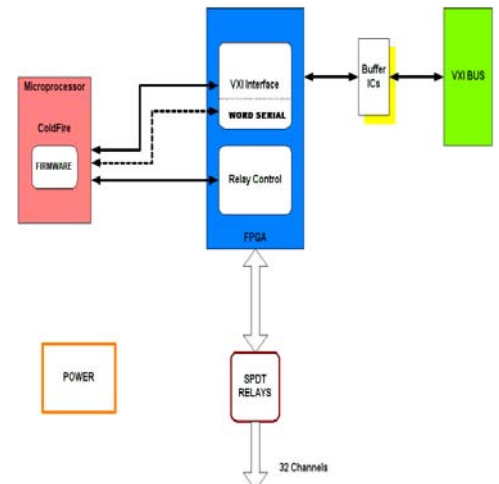
Command Protocol & Syntax

Commands may be long or short form. Characters may be upper or lower case. Commands are executed on receipt. Message terminator may be a line feed and/or EOI bit.

OBSOLESCENCE

While ASCOR has made the outside connectors the same as the original Tektronix module, inside the module is a different story. ASCOR designs the circuitry using the latest parts and technology. There is no worry of the ASCOR unit becoming obsolete because of parts obsolescence. Strict adherence to transmission line design ensures a module with greater bandwidth and lower cross-talk than the original Tektronix unit.

BLOCK DIAGRAM



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SPECIFICATIONS

FUNCTIONAL : **The Model VX4801 provides 48 Optically Isolated TTL or CMOS capable bi-directional I/O lines. The 48 outputs are organized as six 8-bit bytes. Each of the six bytes can be configured under program control.**

Byte Transfer Polarity : Input and output bytes selectable as active high or active low.
Input data : Returned as two hexadecimal ASCII characters per byte.
Input Control : On program command, or with external DRD or DAK handshake.

Output Data : Programmed as two hexadecimal ASCII characters per byte or by an H or L character on an individual byte basis.
Output Control : On program command or with external RFD or DAV handshake.
TRI-STATE Control : On program command on each byte or by external tristate control.

Mask Capability : AND, OR and XOR masking provided of each I/O byte.
Byte Ordering : A predetermined sequence for input or output byte transfer may be programmed. Bytes may be transferred in any required order.

I/O Signal Type : TTL and CMOS compatible (74ACT16541 driver chip).

I/O ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	MIN	TYP	MAX
OUTPUT HIGH VOLTAGE (Voh) Vcc = 4.5 V Ioh = -24mA	3.9 V		
OUTPUT LOW VOLTAGE (Vol) Vcc = 4.5 V Iol = 24 mA			0.44 V
INPUT HIGH VOLTAGE (Vih)	2.0V		
INPUT LOW VOLTAGE (Vil)			0.8V
INPUT CURRENT (Iin)			1ua
TRI-STATE LEAKAGE (Ioz)			5ua

NOTE : There are 22K ohm pull-up resistors to +5v on all I/O and handshake lines.

VXI Compatibility : Fully compatible with VXI Specification Revision 1.4.
VXI Device Type : VXI Message –Based.
VXI Card Size : C size, one slot wide.
Power Requirements : +5 Volts @ 5.0 amps (max)
Temperature : 0°C to +50°C, Operating
 -40°C to +85°C, Storage
Weight : < 4.0 lbs

May 2008