Tektronix VXI Replacement Program

Features

Upgrade Obsolete Tektronix VXI Products

Direct Connector Pin-out and Software Compatibility for Select Models

Switch to VXIbus Modules that will be Supported for 10 to 15 years

Maintain Existing Test Programs

Maintain Existing Interface Adapters

Reduce the Cost of Your ATE

Overview

On May 31, 2001, Tektronix discontinued manufacture of their general purpose VXI modules. This left users who have standardized on certain Tektronix products, or have ATE built around these Tektronix products, with "ATE Obsolescence issues."

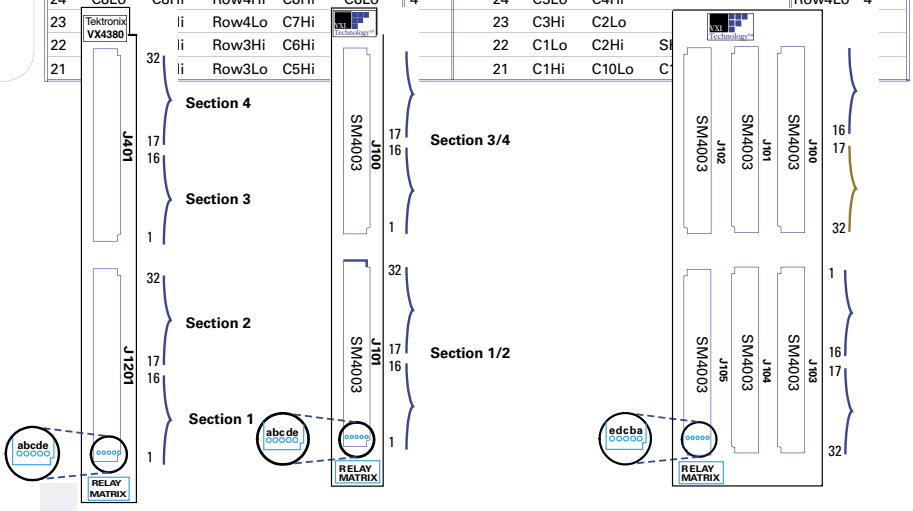
Changing from these Tektronix products to an alternative family of products would traditionally require a large investment that would involve:

- Test program re-writes or translation. This can get very costly depending on the number of fielded test programs
- Test adapter re-engineering
- Re-verification of new test programs
- Cross-referenced products

The ideal approach would be to re-design the test station utilizing products from manufacturers who are aggressively designing and marketing products with similar functionality. Since this approach may not be financially viable, VXI Technology created a program that allows specific Tektronix products to be replaced with functionally superior products that will be supported for at least the next 10 to 15 years.

Figure 1

VX4380 Upper Connector (J401) Pinout							SM4003 Upper Connector (J100) Pinout						
Pin	a	b	c	d	e	Sect.	Pin	a	b	c	d	e	Sect.
32	C16Lo	C16Hi	Row1Lo	C16Hi	C16Lo	4	32	C15Lo	SHIELD	C16Lo	SHIELD		4
31	C15Lo	C15Hi	Row1Hi	C15Hi	C15Lo	4	31	C15Hi	C14Lo	C16Hi			4
30	C14Lo	C14Hi	Row2Lo	C14Hi	C14Lo	4	30	C13Lo	C14Hi			Row1Lo	4
29	C13Lo	C13Hi	Row2Hi	C13Hi	C13Lo	4	29	C13Hi	C8Lo			Row1Hi	4
28	C12Lo	C12Hi	Row3Lo	C12Hi	C12Lo	4	28	C7Lo	C8Hi			Row2Lo	4
27	C11Lo	C11Hi	Row3Hi	C11Hi	C11Lo	4	27	C7Hi	C6Lo			Row2Hi	4
26	C10Lo	C10Hi	Row4Lo	C10Hi	C10Lo	4	26	C5Lo	C6Hi			Row3Lo	4
25	C9Lo	C9Hi	Row4Hi	C9Hi	C9Lo	4	25	C5Hi	C4Lo			Row3Hi	4
24	C8Lo	C8Hi	Row4Hi	C8Hi	C8Lo	4	24	C3Lo	C4Hi			Row4Lo	4
23		li	Row4Lo	C7Hi			23	C3Hi	C2Lo				
22		li	Row3Hi	C6Hi			22	C1Lo	C2Hi				
21		li	Row3Lo	C5Hi			21	C1Hi	C10Lo				



One VX4380 | One SM4380 | The VTI Advantage three VX4380s in 2 slots

Obsolescence

Tektronix VXI Replacement Program

This program enables existing Tektronix VXI product users to continue building systems with minimal engineering impact, and yet provide an upgrade path that can fully utilize the benefits of our line of modular switches and instruments. These benefits include higher-density and performance, improved signal integrity, faster system throughput and lower overall system cost.

The Tektronix VXI replacement program is the result of years of providing solutions to replace obsolete test equipment and switching systems, along with the direct experience in creating cross-referenced products, translation drivers, and translation wiring diagrams for the majority of the Tektronix products that have become obsolete.

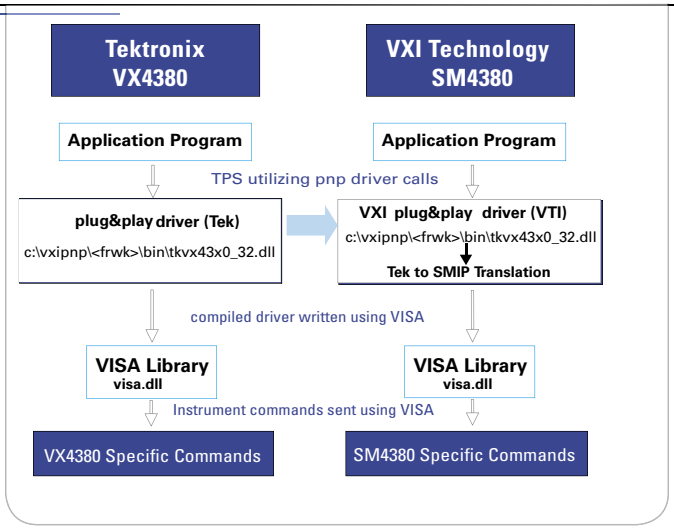


Figure 2a

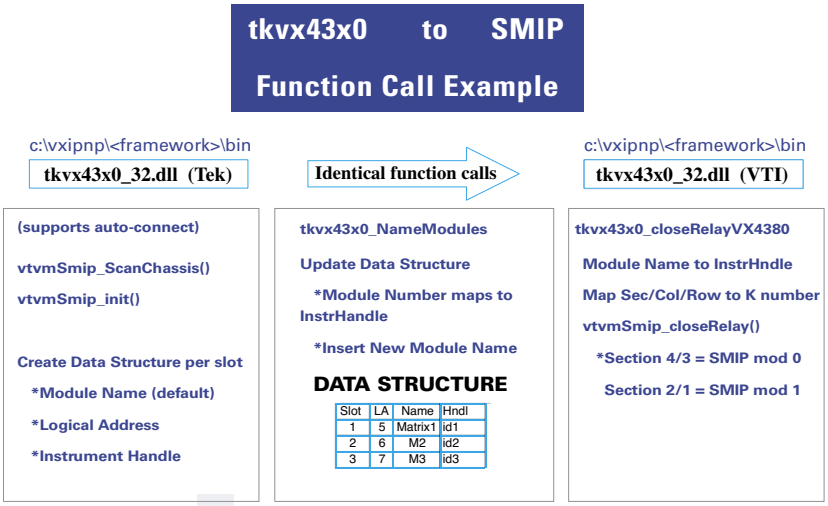
The cross-referenced products that are part of this program all come with translation driver source code and connector cross-reference documentation, minimizing engineering efforts associated with switching products. Some products also have pin-for-pin compatibility. In addition, we also provide functionally similar products to other obsolete Tektronix VXI products. These products do not come with cross-reference documentation or translation drivers, but these can be provided upon request.

There are two main aspects associated with replacing obsolete instruments or switching systems: hardware interfacing and software programming. The issues associated with the hardware interface concern the cabling/wiring from the switch/instrument to the interface adapter that connects the unit under test (UUT). Our cross-referenced products come with Excel spreadsheets and documentation that provide a pin-for-pin map between the obsolete Tektronix hardware and its equivalent replacement. An example is shown in Figure 1.

We can also provide complete cable assemblies/subsystems from our instruments/switches under one part number, completely eliminating any internal engineering. Minimizing the impact on existing application software becomes more difficult. Our cross-referenced products come with translation drivers that replace the existing Tektronix drivers. These translation drivers map the key function calls to the obsolete Tektronix hardware directly to our cross-referenced product (Figure 2a and 2b). These drivers are provided with all source code so that users can modify or code additional functions.

VXI Technology's line of award-winning instruments and switching systems is modular in design, providing considerably higher densities and performance than the obsolete Tektronix hardware. Slot space and cost can also be reduced, providing greater expandability or functionality in the ATE system, while still maintaining backward compatibility. Our application engineers can help provide resources for a solution if required.

Figure 2b



Obsolescence

VXI Technology™

Cross-referenced Products with Replacement Driver

Signal Switching	Old Tektronix VXI Products	VXI Technology
1.3 GHz 8(1x4)	VX4320	SM4320-SMB (pin for pin compatible)
1x120 2-wire MUX	VX4330	SM4330A (pin for pin compatible)
64-Ch. SPST	VX4350	SM4350A (pin for pin compatible)
40-Ch. 10 A SPST	VX4351	SM4351A (pin for pin compatible)
32-Ch. of SPDT	VX4357	SM4357A (pin for pin compatible)
256-Crosspoint Switch Matrix	VX4380	SM4380-03
Chassis		
6-Slot Chassis	VX1406	CT-100C
13-Slot Chassis	VX1401	CT-400
13-Slot Chassis	VX1410A	CT-400
13-Slot Chassis	VX1411A	CT-400
13-Slot Chassis	VX1420A	CT-400
Instruments		
48-Ch. of Isolated Digital I/O	VX4801	SM4801
80-Ch. of Digital I/O	VX4802	SM4802
80-Ch. Open Collector Outputs	73A308	SM73A308
Counter/5.5 Digit DMM/I-O	VX4101A	VT4101A
ARINC 429 Quad Interface	VX4428	AXI429-8

Functionally Equivalent Product

Signal Switching		
2-wire 1x40	VX4332	SMP3001
4-wire 1x24	VX4334	SMP3001
32-ch SPST	VX4353	SM4357A
24-ch SPDT	VX4355	SMP5001
24-ch DPST	VX4355	SMP5001
20-ch DPDT	VX4356	SMP5004 (2)
32-ch SPST	VX4363	SMP5005
24-ch DPST	VX4365	SMP5004 (2)
20-ch DPDT	VX4366	SMP5004 (2)
32-ch SPDT	VX4367	SM4357A
8x16 2-wire Matrix	VX4385	SMP4004
Instrumentation		
Timer/Counter	VX4223	VM2164
Timer/Counter	VX4224	VM2164
Universal Digitizing Counter	73A451	VM2164
DMM	VX4234	VM2710A
DMM	VX4236	VM2710A
DMM	VX4237	VM2710A
Analog/Digital Comparator/Event Detector	VX4286	VM4016 (2)
Analog/Digital Comparator/Event Detector	VX4287	VM4016 (2)
Arbitrary Pattern/Pulse Generator	73A270	VM3640A
25 MHz Function Generator	VX4750	VM3640A
25 MHz Arb Generator	VX4790A	VM3640A
250 MSa/s Arb Generator	VX4792	VM3640A
Multi-channel A/D	VX4244	VM2616
12-channel, 16-bit DAC Card	VX4730	VM3616A
Programmable Resistance	VX4342	VM7004/SMP7600
MIL-STD-1553A/B Bus Monitor	VX4457A	AXI1553-1
Prototyping Module w/VXI Interface	73A451	VT7064
Prototyping Module	73A452	VT7064
Optical Attenuator	VXOA41	SM8101
Mass Storage Controller	VX4570	VT2216A
GPIB Slot Zero Controller	VX4521	GPIB-VXI/C

Obsolescence