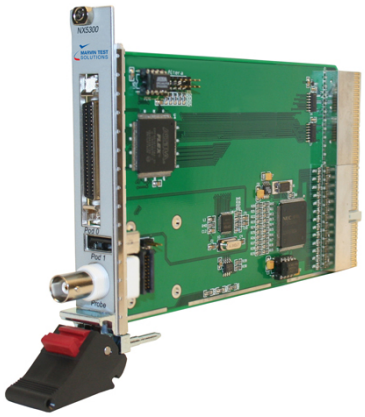
NX5300

JTAG/BACKGROUND DEBUG MODE TEST SYSTEM PXI CARD

- Single slot, 3U format
- Supports troubleshooting of processor based boards via a JTAG or On-chip Debug port
- No special fixturing required
- Supports on-board Flash ROM programming
- 16 channels of general purpose digital I/O
- High speed logic probe for nodal diagnostics
- Includes a pod module to connect the UUT to the PXI card
- 3U PXI Instrument



DESCRIPTION

The NX5300 is a single slot 3U PXI device and interfaces to the unit under test via an On-Chip Debug (OCD) or JTAG port. The NX5300 is a high performance JTAG based background debug mode (BDM) diagnostic system designed for functional test, development, programming and troubleshooting of microprocessor and microcontroller based embedded processor systems. Advanced capabilities include simultaneous support of up to 255 devices on a single scan chain, support of sixteen NX5300 systems controlled by single host machine and configurable JTAG/BDM clock rates up to 24 MHz. The NX5300 includes 16 high-speed measurement channels. Each channel can measure logic levels, frequency, count events and perform a CRC check at rates up to 100 MHz.

The NX5300 can also be used to record and playback serial vector format (SVF) files. Using additional software, in conjunction with boundary scan description language (BSDL) files, the NX5300 can monitor a UUT's boundary scan pins, change the state of any pin, and record an entire sequence of vectors from a known good board. These same vectors can then be used to test other boards, without having to create net lists or digital test vectors – offering an efficient and cost-effective test methodology for complex digital boards and devices.

SOFTWARE

A Windows graphical user interface is included with built-in functions such as memory read, memory write, I/O read, I/O write which provide full access to the UUT. Higher level functions such as bus diagnostics, memory tests, memory move and copy operations can also be executed with a single command. A built in macro language supports easy development of complex test procedures without the need to learn a programming language. The NX5300 can interface to any programming language capable of supporting DLL's such as Visual C, Visual Basic, ATEasy™, Delphi™, LabView™ and LabWindows/CVI™.

APPLICATIONS

- Automatic Test Equipment (ATE)
- Workstation Service and Repair
- Engineering Evaluation

DIGITAL I/O

NX5300

SPECIFICATIONS

TRIGGERING	
Output	Pattern match, based on digital I/O channel states. Connects to PXI trigger bus
Input	PXI trigger bus, trigger a JTAG or digital I/O event
SUPPORTED PROCESORS	
Power PC	603, 8xx, 5xx, 7xx, IBM, AMCC
Arm	ARM7xx, ARM9xx, ARM11xx, Atmel, Cirrus Logic, Sharp, Net Silicon, NXP
MIPS	IDT, MIPS Core, NEC, Broadcom, LSI Logic, Lexra, NXP
Intel	Xscale
AMD	X86, SC520
Freescale	DSP56xxx, ColdFire, CPU16, CPU32, 683xx
DIGITAL I/O	
Channels	16 general purpose. Each channel can be configured as an input or output.
Measutements	Measure logic levels, frequency, count events, generate CRC. Max measurement rate: 100 MHz.
Level	Input: Max 5 V Output: TTL Compatible (5 V) or 3.3 V
Logic Probe	The logic probe is capable of measuring frequencies, logic levels, edge counts and CRC's. Max sample rate is 100 MS/sec and input impedance is 100 KΩ
GENERAL SPECIFICATIONS	
Target UUT V_{CC}	NX5300 supports target UUTs with an operating voltage range from 1.2 V to 5 V.
Max. JTAG clock (TCK) rate	6 MHz, 24 MHz (-5 option)
Size	3U
Operating Temperature Range	0 °C to +85 °C

Note: Specifications are subject to change without notice

ORDERING INFORMATION

NX5300-PXI	JTAG & 16 bit I/O Emulation System (includes NT3200 pos, NT33xx JTAG cable (10,14,16, 20 pin)NT3900-CPU support package module, PXI host board,NT3300 I/O cable)
OPTION	
NX5300-5	High Speed JTAG Option
ACCESSORY	
NT3000-1	JTAG Scan (Software Package #1)
NT3000-2	JTAG Flash Programmer (Software Package #2)
NT3000-3	JTAG Commander (Software Package # 3)
NT3900-CPU	Support Package Module
NT3700-Probe	100 MHz Logic Probe Option
NT3900-ST	Self Test Module
NT3200	PXI/PCI Pod
NT3210	PXI/PCI Test Head Fixture Pod
NT3250	PXI Host Board
NT3300	16 Pin I/O Cable
NT3301	2 Pin Trigger & Ground Cable
NT3310	10 Pin JTAG Cable
NT3314	14 Pin JTAG Cable
NT3316	16 Pin JTAG Cable
NT3320	20 Pin JTAG Cable
NT3400	50 Pin Receiver Wiring Cable Kit
NT3410	50 Pin Test-Head Wiring Cable Kit
NT3420	50 Pin PXI to Pod Cable

Note: The NX5300 is supplied by a 3rd party and resold by Marvin Test Solutions.