# NT3000 CPU Commander™ USB Board Test System

- USB Based JTAG/BDM board test system for troubleshooting processor based boards.
- Windows graphical user interface for interactive mode with built-in macro language no assembly language or programming required.
- Supports on board Flash ROM programming.
- Includes 32 bit DLL for high level programming language support in test systems. (Visual C, Visual Basic, ATEasy<sup>TM</sup>, LabView<sup>TM</sup>, LabWindows/CVI<sup>TM</sup> etc.)
- Additional 16 channels of general purpose digital I/O with high-speed measurement capabilities.
- High speed logic probe for node diagnostics using logic levels, cyclic redundancy check (CRC), transition count and frequency measurements up to 100 MHz.
- Extensive on-line help and user documentation.
- Priced far below any comparable system on the market.

Navatek Engineering Corp. specializes in advanced PC, USB and PXI bus based digital board testers and troubleshooting tools for processor based boards. The NT3000 CPU Commander<sup>TM</sup> plugs into a standard USB port and interfaces to the unit under test through an On-Chip Debug (OCD) or JTAG port. The NT3000 is a high performance JTAG based back ground 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, sixteen NT3000 systems connected to a single host machine and configurable JTAG/BDM clock rates up to 20 MHz.

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. For custom test systems, the NT3000 CPU Commander<sup>TM</sup> can interface to any programming language capable of supporting DLL's such as Visual C, Visual Basic, ATEasy<sup>TM</sup>, Delphi<sup>TM</sup>, LabView<sup>TM</sup> and LabWindows/CVI<sup>TM</sup>.

#### ADDITIONAL NT3000 FEATURES Flash Programming:

Provided through either a stand-alone application program or through DLL calls. Allows on board device programming.

## Digital I/O:

16 channels of general purpose digital I/O. Each I/O channel can be individually configured for input or output.

### Measurements:

16 high-speed measurement channels. Each channel can measure logic levels, frequency, count events and perform a CRC check up to 100 MHz.

## HOST SYSTEMS SUPPORTED

PC's running Windows XP<sup>®</sup>, Windows Vista, Windows 7.

### **PROCESSORS SUPPORTED**

- Power PC: 603e, 5xx, 7xx, 8xx, PPC4xx, MPC5xxx, Freescale, IBM, AMCC
  - M: ARM7, ARM9, ARM11, CORTEX M3, CORTEX A8, Atmel, Cirrus Logic, Sharp, Net Silicon, NXP, Freescale, Samsung, ST Micro
- MIPS: MIPS-32, MIPS64, IDT, MIPS Core, NEC, Broadcom, LSI Logic, Lexra, Cavium Intel: Xscale, Atom (Z5xx, N2xx)

Intel: Xscale, Atom (Z5xx, N2 Marvell: PXA2xx, PXA3xx

Marven: PAA2xx, PA Microchip:PIC32

Freescale: DSP56xxx, ColdFire, iMX3x

Texas Instruments: OMPA35xx, OMAP-L13x, AM35xx

New support packages are added as new processors are introduced. Contact Navatek Engineering for special support requirements.

## CONTACT

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