

	<p><b>KEY FEATURES</b></p> <ul style="list-style-type: none"> <li>▶ Burn-In Solution</li> <li>▶ System Board and RAM Testing</li> <li>▶ System Information</li> <li>▶ Operating System Independent</li> <li>▶ Monitors external temperature</li> <li>▶ Multi-Processor and Coprocessor Support</li> <li>▶ Plugs into any PCI slot</li> <li>▶ Up-to-Date System</li> <li>▶ Serial Port Output</li> </ul>
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**DESCRIPTION**

ASAN ST's newest hardware test device, the ELK-PCI-HDBT, tests system hardware, generates system inventory reports, monitors power supply voltages, measures system temperature, CMOS configuration and provides remote logging using on-board serial port. The ELK-PCI-HDBT is unique for it contains many features not found in other hardware diagnostic cards. The ELK-PCI-HDBT runs diagnostics on your complete system. Simply install the ELK-PCI-HDBT in any PCI 5 or 3.3 volt slot and power-up the system. Utilizing on-board FLASH firmware, the card will take over the system after it has completed POST, automatically performing complete system diagnostics. The diagnostics can be run on each component individually or set to run in an unattended burn-in mode. In burn-in mode, select a preexisting script or create your own. The ELK-PCI-HDBT can also be used to acquire detailed system information and generate an inventory report. In addition to the firmware, system power supply voltages can be monitored using on-board LEDs. Voltages are measured within 2% fluctuations. The power supply voltage reading can also be monitored remotely using the on-board serial port. The serial port will output data that can be monitored remotely using HyperTerminal or similar utility. The ELK-PCI-HDBT is also equipped with two optional temperature sensing probes. These probes can be placed anywhere on the system. These probes have a 12 inch reach, ideal for probing temperature at specific points on the system board. The temperature is measured in Fahrenheit and Celsius scales simultaneously. Temperature results are output to a serial port, generating a real time reading. Finally, the ELK-PCI-HDBT has an on-board CMOS data chip. The data chip is equipped with a battery which has a 10-year life span. The CMOS data chip provides the user a complete CMOS utility. This chip has numerous CMOS functions. It has the ability to copy CMOS settings from a target PC to the card. Later this data can be written to multiple PC's. It can also be used to compare CMOS settings from a target PC to a test PC. This function can be a time saving tool for rewriting CMOS settings on new builds or comparing CMOS settings on a series of systems. The above features make The ELK-PCI-HDBT a must for any burn-in environment. You can set up CMOS, perform system inventory, and run a complete system diagnostics. With its remote capability, all test results, including temperature and voltage details can be routed to a remote PC.

**SPECIFICATIONS**

Burn-In Solution	For comprehensive, unattended system testing. New script writing allows you to program the specific tests, duration per test, and report generation capability.
Onboard Real-Time Clock CMOS Chip	The ELK-PCI-HDBT has an on-board CMOS data chip. The data chip is equipped with a battery which has a 10-year life span. The CMOS data chip provides the user a complete CMOS utility. This chip has numerous CMOS functions. It has the ability to copy CMOS settings from a target PC to the card. Later this data can be written to multiple PC's. It can also be used to compare CMOS settings from a target PC to a test PC. This function can be a time saving tool for rewriting CMOS settings on multiple new builds or comparing CMOS settings on a series of systems.
System Board testing	Continuous loop testing verifies proper operation of CPU, FPU, DMA channels, interrupts, timers, BIOS, keyboard, and other I/O functions. Full testing of CMOS Clock functions is also done.
RAM Testing	Performs the most comprehensive tests available for Base and Extended Memory (up to 2 gigabytes). Performs over 24 different patterns of tests standard and proprietary algorithms. Provides graphic display to pinpoint exact location of failure. Newly improved to test the latest SIMMs, DIMMs, RIMMs,(SDRAM 66-133, DDR, DDR/2, RDRAM(RAMBus), SRAM, ECC, Parity and Non-Parity)
System Information	Provides a complete report on the system. Select information for motherboard, peripherals, IRQ/DMA usage, CMOS, I/O ports, PCI / PnP and Benchmarking. A newly added feature generates SMI information. This will provide detail specification of components. For example, if you want to know what kind of memory you have installed. SMI will return specifics on memory type, module type, installed size, speed, bank connections and error status. Ideal for detecting Over-clocked or Remarked CPUs.
Operating System Independent	It can directly run using Self Boot Technology without the need for ANY operating system for superior low level testing.

Multi-Processor and Coprocessor Support	Support for up to 8 Processors and CoProcessors.
PCI Bus Information and Testing	Full report on PCI Bus states and usage. Displays current PCI Bus Speed. Identifies each PCI Bus component separately. Example of information: Device type, IRQ line used, and memory address occupied. Also includes various PCI Bus tests.
Up-to-date Systems	Perform sophisticated diagnostic testing on IBM and compatible PCs, ranging from older 486 machines to the latest Intel Pentium 4, AMD Athlon MP/XP, and Cyrix processors.
Serial Port Output	The ELK-HDBT is also equipped with the capability to output system information, test results data, and temperature values via a Serial Output.
Monitors External Temperature	The card is equipped with two optional temperature sensing probes. Information is routed through the serial PORT, generating a real-time reading of the voltage and temperature.
Tests The Presence Of Clock And Reset Signals	The ELK-PCI-QPOST monitors the Clock and Reset lines These are the most critical signals a system needs to begin the boot-up process. The ELK-PCI-QPOST uses LEDs to let users know, if one or both of these signals are not present.
Plugs Into Any PCI I/O Slot	The ELK-PCI-HDBT plugs into any open PCI I/O slot. Once the system is powered-up ,the card is automatically begins the Burn-In process.
Incorporated ELK- QT Erase Function	Secure deletion utility, that allows you to wipe your files beyond recovery. Ideal for the deletion of sensitive material or to wipe your hard drive before selling/giving away your computer.
USB Port Testing	New auto detect mode automatically finds all installed ports. The test will also perform an internal and external (using optional ELK-QT-USB controller) modes. During the testing process, it will detail port information and voltage used and modes supported.
Flash / ASIC Technology	Uses the latest in Flash EPROM and ASIC chip technology. The card can be upgraded via software, complete upgrade takes less than two minutes. ASICs allow the latest in hardware design for support of the most current systems with highest accuracy and reliability.

## ORDERING INFORMATION

MODEL	DESCRIPTION
ELK-PCI-HDBT	Comes complete with the following: ELK-PCI-HDBT Hardware card, Serial & Parallel Loop-backs.
ELK-QT-USB	Optional

All Specifications within this document are subject to change without notice.



#128-4, CHEONGPADONG-3GA, YONGSAN-GU, SEOUL, 140-133, KOREA  
 PHONE: 82-2-707-0404 FAX: 82-2-716-7690 [www.asanst.com](http://www.asanst.com) E-mail: [elk@asanst.com](mailto:elk@asanst.com)  
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