



### KEY FEATURES

- ▶ Support for NEW 64-bit Opteron and Athlon64-FX Compatible CPUs
- ▶ Support for latest CPUs and Motherboards
- ▶ RAM Testing
- ▶ Two New Proprietary Memory Algorithms
- ▶ Onboard Serial Port for Remote Monitoring
- ▶ Onboard Memory for TRUE low-level testing
- ▶ Onboard LEDs for critical functions

### DESCRIPTION

The ELK-RAM-STPRO2(Professional RAM Stress Test) is a memory testing hardware/firmware designed for the rigorous memory testing needs of memory and system manufacturers, design engineers, and service professionals. The ELK-RAM-STPRO2 is a Self Booting, Operating System Independent memory diagnostic card for exercising and validating Memory / RAM in Pentium through the latest series of Intel Pentium 4, XEON, AMD Operton, Athlon64-FX, XP, MP and other compatible processors. The ELK-RAM-STPRO2 is the ultimate tool for memory testing and validation. The ELK-RAM-STPRO2 is packed with unique features including memory testing, temperature monitoring, power supply testing and the ability to output data logging using an on-board serial port. You can select from over 30 proprietary memory test algorithms, including two newly added. Currently, The ELK-RAM-STPRO2 supports all Memory SIMMs, DIMMs, RIMMs,(SDRAM 66-133, DDR, DDR/2, RDRAM(RAMBus), SRAM, ECC, Parity and Non-Parity) and other Memory. A major advantage of ELK-RAM-STPRO2, compared to stand alone memory testers, is the capability of testing and validating Memory / RAM within the system environment. Now with on-board memory, ELK-RAM-STPRO2 is able to test memory starting at memory address 2k. The on-board Memory / RAM allows the ELK-RAM-STPRO2 to test the maximum amount of memory. The ELK-RAM-STPRO2 lets users test system Memory / RAM without the interference of any Memory Drivers, TSRs, O/S limitations, or Windows protected mode. The ELK-RAM-STPRO2 runs all memory tests in protected mode which can thoroughly test up to 64 gigabyte of memory. The card will store up to 100 failures and provide a report at the end of the memory testing cycle along with all critical failure data (i.e. time, temperature, and Bus voltage). You can also use the on-board serial port to route the unlimited test results to a remote system using HyperTerminal or similar software. The ELK-RAM-STPRO2 has the ability to monitor system power supply voltages tested to within 2% fluctuations. This is a very easy way of detecting fatal power supply failures. The power supply voltages can be monitored remotely using the on-board serial port. The ELK-RAM-STPRO2 is also equipped with optional temperature sensing probes. These probes can be placed anywhere on the system and are ideal for probing temperature at specific points on the system board. Real time temperature readings are routed through the serial port which are measured in Fahrenheit and Celsius scales simultaneously. Memory testing, logging ability, power supply monitoring, and temperature sensing make the ELK-RAM-STPRO2 the ultimate memory diagnostic and validation product on the market today. So if you are designing memory, designing systems, or building high end servers, make ELK-RAM-STPRO2 a part of your testing and validation procedure.

### SPECIFICATIONS

#### Support for NEW 64-bit Opteron and Athlon64-FX Compatible CPUs

64-bit architecture support for the next generation of high-end computing.

#### Support for latest CPUs and Motherboards

Additional Support for latest CPUs and Motherboards including the 865 & 875 chipset and Pentium 4 Extreme.

**RAM Testing:** Performs the most comprehensive tests available for Base and Extended Memory (up to 4 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-266/333/366/400/466/500, DDR2-533/667, RDRAM (RAMBus), SRAM, ECC, Parity and Non-Parity**)

**Two New Proprietary Memory Algorithms:** Latest Firmware adds to new proprietary memory algorithms, SWARM & HELIX.

#### Onboard Serial Port for Remote Monitoring

Route test results or monitor Real-Time voltage and temperature values to a remote system.

#### Onboard Memory for TRUE low-level testing

**Onboard LEDs for critical functions:** For Critical Functions: VAUX, Clock, Reset, +5Volt

**Onboard Sensor Chip:** For Real-Time onboard measurement of voltage and temperature

**Capable of testing entire CPU memory range:** Up to **4096 Gigabytes** on future processors. 64G limit for Pentium4.

**Tests Base, Extended, and All memory:** In any system using Intel-compatible architecture.

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**PCI card with Onboard Self-Loading program:** Eliminates operating system and hard drive dependencies.

**Full manufacturing-level diagnostics:** Using the latest memory testing techniques, yet occupies a minimum amount of RAM

**Over 30 industry standards and proprietary memory tests:** Can be run on all accessible RAM.

**Provides an unattended Burn-In mode:** For lengthy troubleshooting sessions and new RAM installation verification testing.

#### SPD (Serial Presence Detect) Data of DIMM Modules

Provides SPD information on installed memory modules that include Speed and Configuration values.

**Permits customized testing sessions to be defined:** Any test can be included or excluded from testing as desired

**Benchmarking:** For Cache, Memory, and CPU. Find out how your system components compare to other typical systems.

**Protected mode:** For exceptional testing speed and exclusive memory access.

#### 3.3 Volt Bus Compatibility

**Burn-In:** For comprehensive, unattended system testing. New script writing allows you to program the specific tests, duration, and report generation capability

**Memory Scanner:** Scans base RAM for all programs loaded into memory including; BIOS, Video BIOS, drivers, and any TSRs

### ORDERING INFORMATION

MODEL	DESCRIPTION
ELK-RAM-STPRO2	Professional RAM Stress Test 2

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