

## Why the biggest and busiest computer assemblers and service organizations have relied on Virtual Pc-Check® to provide savings – in time, effort, and testing efficiency in field support...

### Leveraging the Benefits of Testing

For over 2 decades, assemblers and service departments have reaped the rewards of diagnostic testing.

### Saving Time

The most precious resource you have aside from your staff is time. We always need more. Virtual Pc-Check has saved assemblers and service departments significant time in field diagnosis.

Eurosoft Virtual Pc-Check™ uses Eurosoft's flagship software Pc-Check®, in conjunction with virtual pre-scripted test modules, to instantly determine the hardware condition of end-user PCs in the field – so repair or return decisions can be made reliably.

### Time saving features include.....

- *Self-booting design– execute testing upon boot up regardless of installed operating system.*
- *Script editing, saving, and launching features - automatically run the same custom tests each time your end-users boot Virtual Pc-Check.*
- *State of the art test algorithms designed to test the most sensitive and failure prone areas of components first in order to find failures quickly.*

### Safety and Knowledge

For any component that is manufactured, there is always a small (or in some cases large) percentage of units that are failures for one reason or another; we refer to this percentage as defects.

**Defects will occur on every component that is manufactured regardless of type.**

**Defects can be discovered after your customer receives a PC.**

### Diagnostics Provide a Sanity Check

The key for manufactures and servicers is finding the defect before it arrives with the customer. Some components however fail long after they have left the manufacturing plant. **The safe and proven approach to defect management of PC components in the field is diagnostic testing.** **Diagnostic testing provides a sanity check** for systems in the field ensuring you've made the right steps in your support process.

### An integral part of the safety of diagnostics is the data that is provided.

Detailed test outputs, system information, and report output functionality provides confirmation of required hardware, and streamlines warranty returns processes and proof-of-failure requirements.

### Safety and information features include.....

#### Advanced Diagnostic Tests

*Extensive test coverage for all major hardware groups including...*

- Processor
- Memory
- Motherboard
- Drives
- Ports
- I/O
- Audio
- Video
- System Board
- and more
- *Multi-cycle, Timed, Interactive or Passive burn-in testing modes.*
- *Over 70 command line options.*
- Supports multiple processors on all CPU tests.

### Integrated system information tools show hardware in fine detail

- *View detailed system information properties of every component.*
- *See System Management information.*
- *PCI Bus information.*
- *IRQ Routing information.*

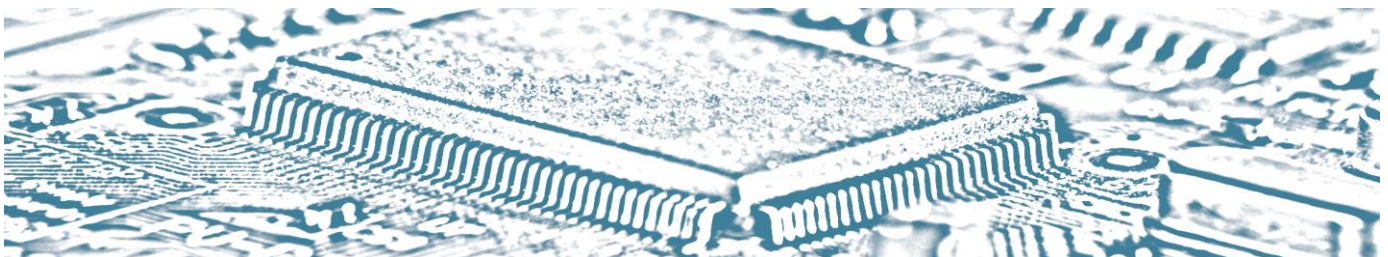
### Complete separation of hardware and software

- *Self-booting separates hardware from your native operating system.*
- *Separates hardware from device drivers.*
- *Identify and test memory modules individually for faster disaster recovery.*
- *Prompt identification of hardware.*
- *Perform state-of-the-art testing.*
- *Find problems fast.*

Independent of operating systems, Eurosoft Virtual Pc-Check™ quickly and accurately identifies hardware faults of installed PCs, providing substantial service advantages for end-user technical support by delivering hardware information and testing for all levels of PC users.

### Flexible distribution methods

Virtual Pc-Check can be bundled on hard drive in a hidden partition, or in a test script package delivered to end user when they have a problem via email or download. You create, control, and provide test scripts to end-users for automatic testing upon booting to Virtual Pc-Check.



**Virtual Pc-Check® is the ideal low-level field test tool...test and detect all hardware...without interference from the operating system or device drivers**

## Virtual Pc-Check® lets you...

- Guarantee reliability of all systems you service in the field
- Increase your profits by reducing system repairs and returns
- Manage your cash flow with various licenses
- Decrease your support costs with the support bundling license
- See immediate ROI...

### Cost Elimination

- No more time lost on chasing intermittent issues in field support.
- Eradicate time wasted on software and driver problems on customer deployed units.
- Typically begin testing within 1 minute of turning on the PC.
- These benefits (and many more) give you immediate ROI.

### Easy to Use – even by end users

- Single CDROM, USB Flash drive, floppy disk, and HD hidden partition options – totally self-contained.
- Begin testing in 1 minute.
- Choose to allow or hide Test menu to end users.
- Reports reasons for “no fault found” that manufacturer-specific diagnostics can’t find.

### eTest Manager® helps create over 65 different start-up options giving you total control over Virtual Pc-Check.

- Windows based script editor used to customise and build Virtual Pc-Check packages.
- Set and save your testing environment settings for automatic execution for end-users.
- Command line option offers scripted selection of sub-tests.
- Create test scripts for use throughout your entire support and supply chain.
- Receive exacting consistency and repeatability in PC testing by...
  - Saving your burn-in test setup as a file.
  - Referencing that file every time users start Virtual Pc-Check.

### Record/ Save all testing related data

- Save all test results to a file.
- Save each system serial number.
- Capture scripted test results as XML.
- Leverage test records for proof of failure requirements and returns.

### Enhanced CPU detection and testing

- Test as many as 160 logical processors simultaneously...including 64-bit.
- Multi-core L2 and L3 cache support.
- JIT code generation and virtual CPU models provide unlimited test combinations.

### Hard disk performance check

- Test ALL the hard drives you support.
- Test hard disks as large as **16 Petabytes**.
- Large sector size support, test 4k sector size devices.
- Fully test hard disks faster and achieve greater test coverage when using a specified testing duration.
- Superior SMART drive testing ensures excessive fault detections will fail a disk...regardless of vendor SMART implementations or the reported disk SMART status.

### Memory Testing - Diagnostic Envy

- Eurosoft has developed one of the most thorough, effective, and trusted memory tests in the industry.
- Find faulty memory faster.
- Tests more memory area, giving precise test results.
- Variety of memory tests included.
- Microtopology and Seating tests run quickly and give accurate results.

- Additional tests for longer and even more thorough testing of system memory.
- Perform a media sweep for visual analysis of performance stutter, as well as minimum, maximum, and standard deviation transfer rates.

### Network card controller tests

- Remove connectivity issues from the equation and verify network functionality at the PC.
- Test high speed (1GB) network cards without an external loopback plug.

### Improved Trusted Platform Module test

- Ensures that TPM devices are capable of securely storing data, such as passwords.

### High Definition Audio tests

- As well as AC97 audio standard test

### Please see the Eurosoft Product Test Table for specific hardware test coverage.

### Virtual Pc-Check Benefits

**Manufacturer bundling-** Helps to keep the product in the field instead of returning to service through quick diagnosis.

**Service/support-** Provides repeatable easy to use test scripts for technicians or remote deployment to end user pcs.

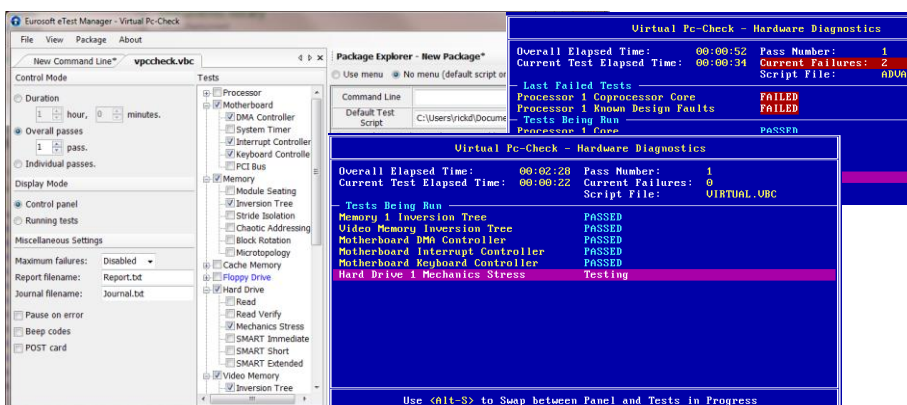
**End users-** Easy to use, provides immediate confirmation of hardware functionality eliminating unnecessary

### Virtual Pc-Check® Package:

- Program CDROM.
- Convenient FTP updates
- Comprehensive user manual
- USB Preferred Port Plug (sample set)
- Loop-back plugs (sample set)
- One year free Upgrade Subscription
- Free Technical Support

### Minimum System Requirements

- .Net Framework V3.5 or greater.
- Adobe Acrobat or similar PDF reader to read the manuals.
- Pc-Check®: EuroDOS™ self-booting operating system (included)
- eTestManager™: Microsoft® Windows XP, Windows 7 or 8 operating system
- Writable media capabilities i.e. CD-R[W] capable drive.
- Approximately 650MB of free hard disk space (for temporary use only).



## Diagnostic coverage for all major hardware groups

### System Information

- Hardware Configuration
- PCI Information
- SMBIOS Information
- Export to File
- Memory and Sector Browsers

### RAID Volume

- Read Tests
- Write Tests
- Random Access/ Seek Tests
- Performance Check
- Support for Exabyte Sizes

### Solid State Drives

- Read Tests
- Random Access Tests
- Cache Tests
- Performance Check
- Standby Test
- SMART Status

### Hard Drive

- Read Tests
- Write Tests
- Random Access Tests
- Cache Tests
- Performance Check
- Standby Test
- SMART Status
- SMART Short Self Test
- SMART Extended Self Test
- SMART Conveyance Self Test

### All Fixed Disks

- Test Presets
- Fixed Duration Test Options
- 4K Sector Optimisation
- Up to 64 Disks.

### Keyboard

- Key Operations
- LEDs
- Repeat
- Stuck Key Detection

### Mouse

- Basic Operation

### Parallel Port

- Controller
- External Loopback

### System Board

- CMOS
- CMOS Battery
- Timers
- Interrupts

### Optical Drive

- CD/DVD/BD-ROM
- Read Test
- Seek Test
- DVD Multi-Layer Test Disc

### USB

- Controller Tests
- External Diagnostic Device

### Firewire

- Controller Tests

### Network Interface

- Controller Test (Specific Controllers)

### Monitor

- Check Gamma
- Colour Linearity
- Alignment
- LCD Dead Pixel
- Test Card

### CPU

- Integer Core
- 64 Bit Operation
- MMX
- 3D-Now!
- SSE
- SSE 2
- SSE 3
- SSSE 3
- SSE 4
- Floating Point
- Multiple Thread
- Multiple Cores
- Multiple Processors
- Supports x2APIC
- Up to 192 Logical Processors

### Video

- Linear Memory Tests
- Microtopology Memory Test
- Chaotic Memory Addressing
- True Colour Palette Test

### PCI Express

- Link Width Configuration

### Serial Port

- Line Control
- Handshake
- Internal Loopback
- External Loopback
- FIFO Test
- PCI Port Expansion Cards
- Point of Sale Support
- Up to 16 Ports

### Trusted Platform Module

- Self Test
- Subversion Attempt

### HD Audio

- Real Time PCM Output
- Streamed PCM Output
- SPDIF DMA

### Beeper

- Sound Internal Beeper

### Memory

- Module Quick Seating Test
- Linear Memory Tests
- Chaotic Memory Addressing
- Bit Stuck High or Low
- Coupled Bit Detection
- Unknown Physical Bit Locality
- Microtopology Test
- Proven Proprietary Algorithms
- Resolve to Module
- Support for 128 Modules
- Supports 4TB Total Memory

**Improve your testing processes**

**Cut your costs**

**Strengthen your brand image**

**Increase your customer satisfaction**

**Compete in the market place**

**Elevate your image with shareholders and customers**

**Gain the confidence and tools to meet and exceed your customer's expectations**

**Call a Eurosoft consultant today to discuss your testing goals...**



# Virtual Pc-Check™

## PC resident diagnostic software

Available test accessories help you find cabling and configuration errors faster.



Eurosoft PC Test Accessories include: USB Preferred Port Plugs™, Serial & Parallel Loop-back Plugs, Audio Test Cables, DVD Test Discs™, and CDROM Test Discs™. Stand-alone accessories include the Preferred POST Board™ PCI/ISA.

Extend and enhance your test procedures with Eurosoft's proven PC Diagnostic Programs and unique test accessory hardware. Each computer testing accessory is developed to work specifically with Eurosoft's test programs providing you with independent and reliable test results of peripheral ports and media devices.

### Need more test coverage?

Also consider adding Eurosoft QA+WIN™ Diagnostic Software for testing inside of Windows



Addresses all aspects of the PC lifecycle, including assembly, support, repair and recycling

Thoroughly tests components and peripherals using Windows-based diagnostics for software driven/PCI hardware

Delivers wide-ranging hardware tests to ensure that PCs are configured correctly regardless of the component brands

Allows fast and targeted test loading to satisfy vendor-specific tests requirements

Reduces expensive field service calls, NTFs, wrongful product returns and overstocked field service products

Provides test and diagnostic data that can be printed, viewed or used to generate reports and other user-specific requirements

## Call a Eurosoft consultant today to discuss your testing goals...

Contact us for further information on Pc-Check® or any other Eurosoft product.

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