



Pc-Check® Diagnostic Software

Pc-Check, original self-boot, combining Pc-Check UEFI, challenges the widest testing landscape with 'bare-metal testing' dedicated to all your PC assembly, integration, services, installations, repair and refurbishing.

Unreliable testing of computers cost companies and technicians wasted time and money. Inaccurate results impact operations, leading to more technical support calls, unnecessary rework, product returns and customer dissatisfaction.

Included as part of the Pc-Check® UEFI package, self-booting Pc-Check® diagnostic software has a strong advantage testing older Legacy, pre-UEFI or secure boot disabled computers. Pc-Check® is your **ready-to-use-now diagnostic software**. From its original self-boot start-up, to the now infamous Microtopology memory testing, no installed operating system means **more errors are found**. Pc-Check diagnostic software only tests the hardware you want it to. **No gimmicks, no files touched, no brand names considered**

— **just reliable hardware test results**. Enhance your service reliability and computer quality, decrease technical support telephone calls, and improve customer satisfaction and confidence. **Pc-Check finds the hardware faults that other test product can't or won't reveal.**



Dual testing advantage for old and new systems

✓ Included as part of the Pc-Check UEFI package
Pc-Check® and Pc-Check® UEFI form the ultimate testing solution for legacy, and new UEFI based PCs.

Direct bare-metal legacy hardware testing, 32/64Bit

✓ Fast loading, pre-boot/self-boot diagnostics fully test critical components without interference from either the installed operating system or device drivers.

Large detection of hardware device testing, specialist test groups, unlimited scripting capacity

✓ Thoroughly validate the PC products and services you sell, support, service and repair: servers, embedded, laptops, notebooks, desktops, and more.

Scripted or selected: Component and Burn-in tests, Duration, any Number of passes

✓ Total control of your diagnostic process – you define the test requirements. Reveal hard-to-find intermittent errors. Proves working hardware.

Unattended testing, launch a test script automatically, at start-up

✓ Test PCs without users involved, no mistakes in tests deployed, consistent, repeatable results.

Test the fullest range of installed component and storage

✓ Identify the individual memory module for 128 DIMM up to 3.5 Terabytes; and drives with 'Multi-Exabyte' sizes; plus CPU packages to 160 maximum.

Pc-Check is the ideal low-level test tool for legacy hardware

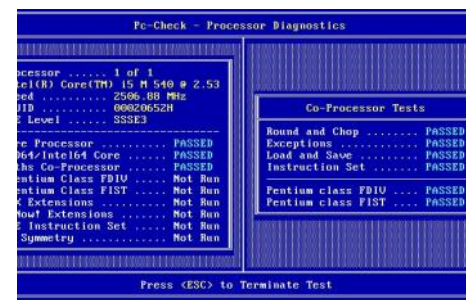
Self-boot legacy diagnostics



Diagnostic System Burn-In

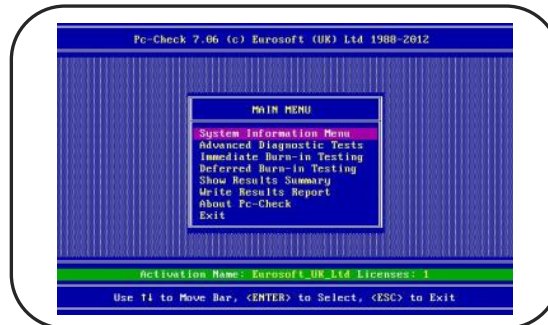


Low Level Component Tests



Test up to 160 logical processors simultaneously.

Test memory modules individually



Self-boot operating system independent

Test outside of operating systems with Self-Booting diagnostics

No concern of OS driver stack filtering or blocking commands.

No concerns of OS modifying or redacting returned system information.

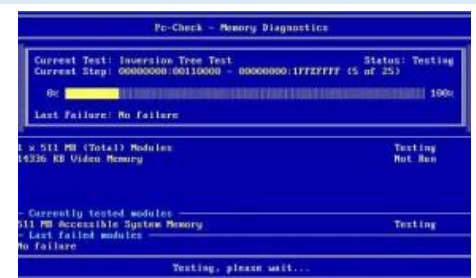
No abstraction or virtualisation of hardware.

Dual bare metal testing options

Pc-Check® and Pc-Check® UEFI combine for the ultimate bare metal testing solution for legacy, and new UEFI based PCs all on one single package. Add on Pc-Check® Windows, expanding your range of diagnostics to a perfect 3-point test plan.

Record and Save all testing related data

- Save all test results to a file.
- Save the test technician's name.
- Save each system serial number.
- Capture scripted test results as XML



Maximize profits by reducing hardware return costs

- Reduce asset identification, assembly, upgrade, and repair test workloads.
- Reduce returns and repairs.
- Reduce support calls.
- Eradicate time wasted on software and driver problems.
- Increase profitability by improving PC reliability during system manufacturing integration, upgrading and servicing.

Control and contain errors

- Reveal hard-to-find intermittent errors.
- Log faults and unreliable computers.

Increase positive throughput by reducing human errors

- Standardized test scripts control unauthorised users and test usage.
- Identify hardware faults quickly, save hundreds of man-hours in fault testing.
- Versatile for variable user skill levels

One USB device, two diagnostics solutions

Containing **both Pc-Check and Pc-Check UEFI diagnostic software** the presence of legacy or UEFI compliant hardware is automatically detected.

If the system is a legacy device, Pc-Check will boot and execute; if the device is UEFI compliant, Pc-Check UEFI will boot and execute – even with secure boot turned on.

Diagnostic coverage for all major hardware groups in a native UEFI pre-boot, Self-Boot and Microsoft Windows or Microsoft Windows Preinstallation Environment.

Native UEFI Diagnostics

Network

Internal Ping Test

External Ping Test

Register Test

Hard Drives

S.M.A.R.T. immediate

S.M.A.R.T. Short Self Test

S.M.A.R.T. Conveyance

S.M.A.R.T. Extended Self Test

Butterfly Seek

Random Read

Linear Read

Standby

Non-Destructive Write

Internal Cache

Solid State Drives

Linear Read

Random Read

S.M.A.R.T. Immediate Test

S.M.A.R.T. Short Self Test

S.M.A.R.T. Extended Self Test

S.M.A.R.T. Conveyance

Internal Cache

Memory

Block Rotation

Quick

Stride Isolation

Seating

Inversion Tree

Microtopology

Pseudo-random Data

Pseudo-random Address

NVMe Drives

Random Read

Linear Read

Internal Cache

S.M.A.R.T. Health Test

System Block Devices

Basic Functionality

Comprehensive Functionality

Processor

Core Instruction Set

Floating Point Instruction Set

SSE Instruction Set

SSE2 Instruction Set

SSE3 Instruction Set

SSSE3 Instruction Set

SSE 4 Instruction Set

AVX Instruction set

Pairing Symmetry

Execution Symmetry

Cache Coherency

Serial Ports

Line Control

Handshake

External Loopback

Internal Loopback

FIFO

Divisor Clock

Endurance

Optical

Basic Functionality

Comprehensive Functionality

Butterfly Seek

USB

Quick Test

Max Bit Stuffing

NRZI Glitch Zero

NRZI Oscillation Type 1/2/3/4

Max Disparity

Random Data

Motherboard

Memory Buses

PCI Buses

Disk Buses

Non-Volatile Storage

Real Time Clock

Monitor

Panel Test

Self-Boot Legacy Diagnostics

Memory

Module Seating

Inversion Tree

Stride Isolation

Small Block Stride

Chaotic Addressing

Block Rotation

Microtopology

Microtopology (Quick)

Microtopology (long)

Cache Memory

Inversion Tree

Stride Isolation

Chaotic Addressing

Block Rotation

Microtopology

Hard Drives

Read Quick/Standard/Full/Custom

Read Verify Quick/Standard/Full/

Custom

Non-Destructive Write Quick/Standard/

Full/Custom

Destructive Write Quick /Standard/Full/

Custom

Mechanics Stress Quick /Standard/

Full /Custom

Internal Cache

Standby

Performance

Standby

S.M.A.R.T. Immediate

S.M.A.R.T. Short

S.M.A.R.T. Extended

S.M.A.R.T. Conveyance

SSD Drives

Read Quick/Standard/Full/Custom

Read Verify Quick/Standard/Full/

Custom

Non-Destructive Write Quick/

Standard/Full/Custom

Destructive Write Quick/Standard/

Full/Custom

S.M.A.R.T. Immediate

S.M.A.R.T. Short

S.M.A.R.T. Extended

S.M.A.R.T. Conveyance

Performance

NVMe Drives

Read Quick/Standard/Full/Custom

Read Verify Quick/Standard/Full/

Custom

Non-Destructive Write Quick/

Standard/Full/Custom

Destructive Write Quick/Standard/

Full/Custom

S.M.A.R.T. Immediate

S.M.A.R.T. Short

S.M.A.R.T. Extended

S.M.A.R.T. Conveyance

Performance

Processor

Core Instruction Set

AMD64 Core

Intel64 Core

Coprocessor Core

Known Design Faults

3DNow! Extensions

MMX Extensions

SSE (SIMD) Extensions

Multi Processor Symmetry

Motherboard

DMA Controller

System Timer

Interrupt Controller

Keyboard Controller

PCI Bus

Real-Time Clock Chip

Trusted Platform Module

Self Test

Subversion Attempt

Input Peripherals

Keyboard

Mouse

Video Memory

Inversion Tree

Stride Isolation

Small Block Stride

Chaotic Addressing

Inverse Mesh

Block Rotation

Microtopology

Serial Ports

Line Control

Handshake

Loop-back

Internal FIFO

Internal Loop-back

Divisor Clock

FireWire

Controller Test

Component Audit

Compare

Firmware

ACPI

Network

Internal Loopback

External Loopback

Controller

USB

Controller

Functionality

Audio

Real-time PCM

Streaming PCM

SPDIF Run DMA

Internal Speaker

Beep Test

PCI Express

Link Width Configuration

Video Adapter

Colour Purity

True Colour

Alignment

LCD

Test Card

Parallel Ports

Verify Controller

Verify Status Port

Interrupt

Optical

Transfer

Random Seek

Test Disc Read

Laser Refocus

ATA Controller

Parallel

Serial

Windows Diagnostics

Parallel Ports

- Data Port
- External Loop-back
- Status Register
- Memory
 - Quick
 - Pseudo Random Data
 - Walking Bit Left/ Right
 - Inverse Walking Bit Left/Right
 - Chequerboard
 - Bit Stuck High/Low
 - Pseudo Random Address
 - Micro-topology
 - Memory Mismatch

Gyroscope

- [Quick Status](#)
- [Core Recognition](#)
- [Simple Roll Test](#)
- [Gyroscope Roll](#)

Accelerometer

- [Core Recognition](#)
- [Quick Status](#)
- [Acceleration](#)

Location

- [Core Recognition](#)
- [Quick Status](#)
- [Location](#)

Network

- Configuration
- IPv4 Connection
- [Wireless Strength](#)
- [Wireless Connection](#)
- System Connected
- [Ethernet Connectivity](#)
- Loopback Signal

Hard Drives

- Butterfly Seek
- Random Read
- Linear Read
- S.M.A.R.T. Failure
- S.M.A.R.T. Short
- S.M.A.R.T. Conveyance
- S.M.A.R.T. Extended
- Hard Drive Temperature

Biometric

- [Core Recognition](#)

Optical

- Linear Read
- Random Read
- Advanced Movement
- Media Erase
- Directory Write
- ISO Image Write
- Media Eject

FireWire

- IEEE 1394

Compass

- [Core Recognition](#)
- [Quick Status](#)
- [Direction](#)

NVMe Drive

- Random Read
- Linear Read
- S.M.A.R.T. Failure
- USB
 - Detected Devices
 - Connectivity
 - Quick Test
 - NRZI Max Bit Stuffing
 - NRZI Glitch Zero
 - NRZI Oscillation Type 1/2/3/4
 - Max Disparity
 - Random Data
 - Speed
 - Connection Verification

Floppy Drives

- Butterfly Seek
- Linear Read
- Read Write
- Media Change
- Write Protect

Monitor

- Red /Green/Blue Purity
- Mesh/Inverse Mesh
- White/ Green MEME
- Tonality
- Grid
- LCD Dead Pixel
- Monitor Count
- Internal Monitor Count
- VGA/DVI/HDMI Monitor Count
- Display Port Monitor Count
- Wireless Monitor Count
- EDID Checksum

Serial Ports

- Configuration Registers
- Quick Loop-back
- Baud Rates
- Sustained Loop-back
- Priority Transmit

Removable Media

- Linear Read
- Random Read
- Connectivity

System

- Stress
- [Sleep](#)
- [Hibernate](#)
- [Quick Dump Test](#)
- Lid Detect
- Convertible System
- Operator Response

Battery

- Voltage
- Performance
- Quick State
- Core Recognition
- Advanced State
- Charge Level
- Charge Life

Processor

- Core Instruction Set
- Floating Point Instruction Set
- MMX Instruction Set
- SSE Instruction Set
- SSE2 Instruction Set
- SSE3 Instruction Set
- SSE 4.1/ 4.2/ 4A Instruction Set
- Cache Functionality
- Multi-core
- Multi-processor
- Core Priority
- Thermal Stress
- Power Stress
- CPU Fan Test
- CPU Temperature

Audio

- Audio Connection
- [Loop-back Count](#)
- [Advanced Quality](#)
- [Quick Microphone](#)
- [Quick System Sound](#)
- [Volume Change](#)
- [Playback](#)

Display Adapter

- [Linear Memory](#)
- [Micro-topology Memory](#)
- [Chaotic Addressing Memory](#)
- [Hardware Acceleration](#)
- Graphics Card Temperature
- [Default Driver](#)
- OpenCL Bandwith
- OpenCL Walking Zeros
- OpenCL Walking Ones
- OpenCL Moving Inversion
- OpenCL Integer Logic
- OpenCL Integer Logic -Local Memory
- OpenCL Random
- OpenCL Modulo
- CUDA Bandwidth
- CUDA Walking Zeros
- CUDA Walking Ones
- CUDA Moving Inversion
- CUDA Integer Logic
- CUDA Integer Logic - Local Memory
- CUDA Random
- CUDA Modulo
- CUDA Compute
- CUDA Stress

Video Capture

- Capture Driver
- [Composite Capture Driver](#)
- [S-Video Capture Driver](#)
- [TV Capture Driver](#)
- [RGB Capture Driver](#)
- [Capture](#)
- [Composite Capture](#)
- [S-Video Capture](#)
- [TV Capture](#)
- [RGB Capture](#)

RAID

- Linear Read

Motherboard

- North-bridge
- South-bridge
- CMOS Clock
- CMOS Checksum
- CMOS Battery
- System Fan
- Voltage Core Detection
- System Temperature

Operating System

- [License](#)
- Windows 10 Support
- Event Log
- Kernel Response
- Driver
- Signed Driver
- Security Support

Hardware Monitor

- System Temperature
- CPU Temperature
- CPU Fan
- System Fan
- Voltage Core Detection Test
- Drive Temperature
- Graphics Card Temperature

Solid State Drives

- Linear Read
- Random Read
- S.M.A.R.T. Failure
- S.M.A.R.T. Short
- S.M.A.R.T. Conveyance
- S.M.A.R.T. Extended

Touch Screen

- Pen Grid
- Pen Axis
- Pen Accuracy
- Touch Multi-Touch
- Touch Ghost-Touch
- Touch Path Continuity
- Touch Curve Continuity
- Touch Primary Touch
- Touch Width
- Touch Grid
- Touch Axis
- Touch Accuracy
- Touch Gesture

Input Peripherals

- Keyboard/Keyboard LED
- Quick Mouse
- Mouse Button
- Movement
- Quick Keyboard

Ambient Light

- [Core Recognition](#)
- [Quick Status](#)
- [Ambient Light Level](#)

Server

- [IPMI System Event Log](#)
- [IPMI Health/ Sensor/ Alarm](#)
- [Temperature Sensor](#)
- [Fan Sensor](#)
- [Voltage Sensor](#)
- [Power Sensor](#)
- [Constant Sensor](#)

The following test groups or tests require full Windows environment.

- Video | Biometric Devices | Capture Card* | Network Interface tests for wireless network interfaces | System Sleep Test | System Hibernate Test | Battery Voltage Test | Server Group | Sensors

*Generic Capture Driver Test available in Microsoft Windows Preinstallation Environment (WinPE).

Eurosoft test accessories required for peripheral ports and media trays: USB, serial, audio, DVD/CDROM.

Mac® Boot Camp® drivers required in WinPE or use Pc-Check® WinPE Image Creator build tool without drivers (all tests

Tests in blue are not compatible with Microsoft Windows Preinstallation Environment (WinPE).

Who Uses the Pc-Check® Diagnostic Software Suite?

Solutions for an ever changing landscape...

Testing PCs has financial reward. Starting with a series of simple test steps, you gain immediate cost savings.

Computer manufacturing and system integrating rely on diagnostics to form standard test practices. Repair, services and support are blending with field technicians, backing MSP's who remotely manage all varieties of computers. Critical assessment of systems situated publicly: government, military, education, healthcare, as well as private verticals expect compliant, running systems. Refurbishing has taken off, extracting re-workable components to balance a broad eco-system, recycling where they can't. Everywhere, demand for reliably running PCs is required and expected.

Ensuring reliability requires quality testing. The Pc-Check diagnostic suite takes on the widest testing landscape, instilling quality, combining bare-metal UEFI and legacy testing, plus Microsoft Windows/WinPE too. The end result: components are reliably tested and validated independent of the operating system [and] within the Microsoft Windows environment whether new or old devices. Proven diagnostics, capable of assisting all sizes of companies and skill sets, loads of testing features and unlimited ways of using them. **Testing brings reward.**

Manufacturing

OEM/ODM
System Builders
Assemblers
System Integrators

Manufacturers and system integrating of all sizes, those who build fresh and new, use the Pc-Check® diagnostic suite to validate new hardware and system configurations prior to investing time in loading an operating system.

Refurbishing

Microsoft Authorised Refurbishers
ITAD
Rentals and Leasing
Recyclers

Refurbishers, eco-committed, re-manufacturing, repurposing or IT asset disposing PCs, use the Pc-Check® suite to quickly and reliably validate inbound and outbound hardware assets to determine suitability for reuse, before upgrading, re-imaging and hard drive data erasing with Eurosoft's ZeroData™ Windows drive erasure software.

Services

Break-Fix Operations
Field Technicians
Computer Shops
Consultants

Servicing has a wide commitment, bringing consumers and industry closer to the repair process. The full Pc-Check® suite brings portable testing to the PC with pre-boot options, multiple script creation, and recordation, reaching a variety of PCs and diverse customers.

Support

Network Administrators
I.T. Professionals
Managed Service Provider
Help Desk

Support can involve deployment and online technical sessions. Preventative maintenance, secure hardware platforms and rapid diagnosis for disaster recovery is required. Each Pc-Check® program gives a fast and flexible approach to assessing hardware issues at the start, and end point of a support session.

Flexible user and licensing options to perfectly fit your costs and needs.

Eurosoft (UK) Ltd are dedicated to offering a variety of diagnostic and test management solutions as standalone packages, bundled with systems and services, as well as site licenses of all sizes. Fully commercially supported, and maintained to test the widest range of PC-based hardware, regardless of brand. Whether you are responsible for 1, 100 or 1000+ test stations or have as many technicians at your disposal, the Pc-Check diagnostic suite offers flexible testing solutions, giving you maximum reliability over your entire operation.

Contact us at the locations below to take advantage of a new testing experience today.

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