



# Pc-Check® Windows® Diagnostic Software

*Pc-Check Windows challenges the widest testing landscape with Windows and WinPE based testing, dedicated to all your PC assembly, integration, services, installations, repair and refurbishing.*

Unreliable testing of computers cost companies and technicians valuable time and money. Inaccurate test results impact operations, leading to more technical support calls, unnecessary rework, product returns and customer dissatisfaction. Proof of build and service has now become a requirement.

Pc-Check® Windows® has a testing advantage with Windows-based computers. Fully compatible with **Windows 10 and UEFI hardware, booting WinPE**, ensuring components from a PC and Mac® are reliably validated in the environment in which they are used. Pc-Check Windows computer diagnostics give you the stress testing you expect, but more to the point, they give you absolute knowledge of hardware conditions – results you can count on. Proven diagnostics, capable of assisting all sizes of companies and skill sets, loads of testing features and unlimited ways of using them.

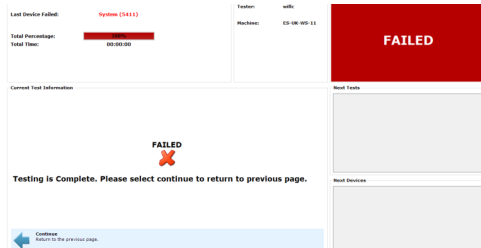


**Pc-Check Windows is the answer to solving your testing dilemmas – “do I release, repair, repurpose, refurbish or replace?”.** Enhance your service reliability and computer quality, decrease technical support telephone calls, and improve customer satisfaction and confidence. **Pc-Check Windows finds the hardware faults that other test products can't or won't reveal.**

Powerful, testing under Microsoft® Windows®	✓ Test all <b>Windows dependent hardware: such as webcams, 3D Graphics, wireless network devices, and more.</b>
Test UEFI enabled hardware in Windows®	✓ <b>Full UEFI testing on all the latest Windows® PCs, 64Bit hardware.</b> No need to disable Secure Boot.
Integrate 3rd party UEFI tools	✓ Thoroughly test PC hardware <b>before launching BIOS flashing or DMI tools in the same session.</b> No need for multiple media or programs.
Scripted or selected: System Stress test and Burn-in test, Duration, any Number of passes	✓ Test hardware parts, as specialist test groups or with unlimited scripting capacities. <b>Total control of your diagnostic process.</b> Reveal hard-to-find intermittent errors.
Test the fullest range of installed components and storage	✓ <b>Unlimited Memory DIMM reporting; and 2-Exabytes drives; plus CPU packages to 1024 to 256 core and more in Windows.</b>
Unattended testing, launch scripts automatically, upon startup	✓ Test PCs without users involved, <b>no mistakes in tests deployed, consistent, repeatable results.</b>
Create, and test PCs and Macs from self-booting WinPE media	✓ Test PCs, even Macs before you install the operating system.

# Use Windows®-based tests to fully validated UEFI enabled components as well as non-UEFI hardware

## Blue Screen Of Death Test



## Session Log of Test Results

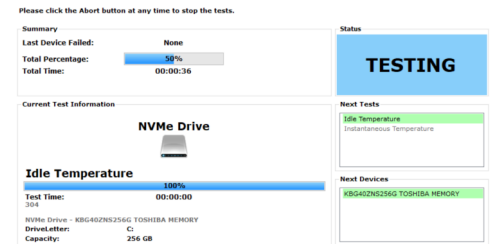
### View Session Log

Results Summary		Time	General Information
Failures:	0	Started: 2:22:12 PM	
Passes:	15	Ended: 2:22:58 PM	
Others:	13		
Total:	28	Total: 00:00:46	

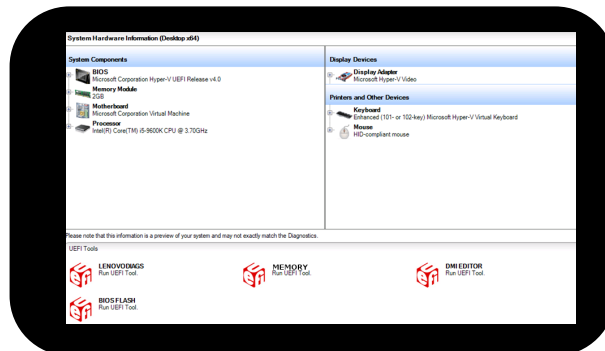
  

Test Results		Result
Group-Device-Test		
Intel(R) Core(TM) i5-2450M CPU @ 2.50GHz-Multi-core		PASSED
Intel(R) Core(TM) i5-2450M CPU @ 2.50GHz-Multi-processor		INAPPLICABLE
Intel(R) Core(TM) i5-2450M CPU @ 2.50GHz-Core Priority		PASSED

## NVMe Idle Temperature



**500+ Tests**  
**31 Test Groups**  
**Unlimited Scripting**



**Add Unlimited**  
**UEFI Vendor**  
**Tools**

## Test PCs and Macs outside of Windows and Linux® with USB Booting WinPE

'WinPE Image Creator' application prepares custom, self-booting WinPE test media.

Use Windows Preinstallation Environment (WinPE) with Microsoft OEM / SDK license

## Variable Media and Settings

Create WIM, ISO and WinPE Bootable USB.

Utilize Microsoft ADK version 8.1 /10.

Customize image settings for image type, region, and more.

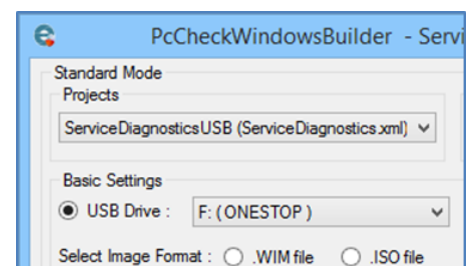
Unlimited script and image builds.

## Create and Automate Test Tools

Add 3rd-party vendor tools such as BIOS and DMI. Create different diagnostic test routines for manufacture, refurbishing, service and support.

Fully networkable, allows deployable and remote testing sessions.\*

Network drive logging for connectivity and distribution of test result files.



## Maximize profits by reducing hardware return costs

- Reduce asset identification, assembly, upgrade, and repair test workloads.
- Reduce returns and repairs.
- Reduce support calls.
- Increase profitability by improving PC reliability during system manufacturing integration, installation, upgrading and servicing, repairs and refurbishing.

## Control and contain errors

- Reveal hard-to-find intermittent errors.
- Log faults and unreliable computers.
- Deploy tests, operations' wide, for maximum consistency.

## Increase throughput by reducing human errors

- Standardized test scripts control unauthorised users and test usage.
- Remotely coach technical support with simple Pc-Check test script experience.

## Recommended Requirements:

- Intel/AMD 32/64 bit platform with power, 200MB hard drive space, able to run Microsoft Windows 7/8/8.1/10.
- Windows® Preinstallation Environment (WinPE- 32bit and 64bit editions) with Microsoft OEM license (8.1 or above)
- Server 2003/2008(R2)/2012(R2) /2016 for remote deploy\*
- Standalone, bundle, deployable diagnostics.

\*Site License required.

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

## 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  
Data Route

### Gyroscope

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

### Accelerometer

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

### Location

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

### Bluetooth

Device Search  
Device Pairing

### 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  
Idle Temperature  
Instantaneous Temperature  
S.M.A.R.T. Threshold  
S.M.A.R.T. Custom  
Drive Health

### Optical

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

### Compass

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

## NVMe Drive

Random Read/Linear Read  
S.M.A.R.T. Failure  
Idle Temperature  
Instantaneous Temperature

## 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  
Monitor Brightness

## 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 Blue Screen Dump](#)

## Lid Detect

## Convertible System

## Operator Response

## Blue Screen Event

## Battery

Voltage  
Performance  
Quick State  
Core Recognition  
Advanced State  
Charge Level  
Charge Life  
Battery Presence

## Processor

Core Instruction Set  
Floating Point Instruction Set  
SSE/2/3 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  
AVX Instruction Set  
SSSE3 Instruction Set  
FMA3/FMA4 Instruction Set  
CLMUL Instruction Set

## 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 Bandwidth  
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](#)

## 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 (SSD)

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  
Idle Temperature  
Instantaneous Temperature  
S.M.A.R.T. Threshold  
S.M.A.R.T. Custom  
Wear Range Delta  
Drive Health

## 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  
Keyboard Dock Detect  
Keyboard Connection

## Ambient Light

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

## Server

IPMI System Event Log  
IPMI Health/ Sensor/ Alarm  
Temperature Sensor

## FireWire

IEEE 1394

The test groups or tests noted in [BLUE](#) require a full Windows environment. Example (see above for all): 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 non-native, Intel Architecture only). 3rd-party vendor tools must be UEFI compatible.

<b>Native UEFI Diagnostics</b> <b>Network</b> Internal Ping Test External Ping Test Register Test <b>Hard Drives</b> 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 <b>Solid State Drives</b> 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 <b>Memory</b> Block Rotation Quick Stride Isolation Seating Inversion Tree Microtopology Pseudo-random Data Pseudo-random Address <b>NVMe Drives</b> Random Read Linear Read Internal Cache S.M.A.R.T.    Health Test <b>System Block Devices</b> Basic Functionality Comprehensive Functionality	<b>Processor</b> 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 <b>Serial Ports</b> Line Control Handshake External Loopback Internal Loopback FIFO Divisor Clock Endurance	<b>Optical</b> Basic Functionality Comprehensive Functionality Butterfly Seek <b>USB</b> Quick Test Max Bit Stuffing NRZI Glitch Zero NRZI Oscillation Type 1/2/3/4 Max Disparity Random Data <b>Motherboard</b> Memory Buses PCI Buses Disk Buses Non-Volatile Storage Real Time Clock <b>Monitor</b> Panel Test
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<b>Self-Boot Legacy Diagnostics</b> <b>Memory</b> Module Seating Inversion Tree Stride Isolation Small Block Stride Chaotic Addressing Block Rotation Microtopology Microtopology (Quick) Microtopology (long) <b>Cache Memory</b> Inversion Tree Stride Isolation Chaotic Addressing Block Rotation Microtopology <b>Hard Drives</b> 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	<b>SSD Drives</b> 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 <b>NVMe Drives</b> 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 <b>Processor</b> Core Instruction Set AMD64 Core Intel64 Core Coprocessor Core Known Design Faults 3DNow! Extensions MMX Extensions SSE (SIMD) Extensions Multi Processor Symmetry	<b>Motherboard</b> DMA Controller System Timer Interrupt Controller Keyboard Controller PCI Bus Real-Time Clock Chip <b>Trusted Platform Module</b> Self Test Subversion Attempt <b>Input Peripherals</b> Keyboard Mouse <b>Video Memory</b> Inversion Tree Stride Isolation Small Block Stride Chaotic Addressing Inverse Mesh Block Rotation Microtopology <b>Serial Ports</b> Line Control Handshake Loop-back Internal FIFO Internal Loop-back Divisor Clock <b>FireWire</b> Controller Test <b>Component Audit</b> Compare <b>Firmware</b> ACPI	<b>Network</b> Internal Loopback External Loopback Controller <b>USB</b> Controller Functionality <b>Audio</b> Real-time PCM Streaming PCM SPDIF Run DMA <b>Internal Speaker</b> Beep Test <b>PCI Express</b> Link Width Configuration <b>Video Adapter</b> Colour Purity True Colour Alignment LCD Test Card <b>Parallel Ports</b> Verify Controller Verify Status Port Interrupt <b>Optical</b> Transfer Random Seek Test Disc Read Laser Refocus <b>ATA Controller</b> Parallel Serial
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# 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 Builder™ Test Management Suite and Pc-Check® diagnostic suite to validate new hardware and system configurations prior to investing time in loading an operating system, and shipping into the channels.**

### Refurbishing

Microsoft Authorised Refurbishers  
ITAD  
Rentals and Leasing  
Recyclers

**Refurbishers, eco-committed, re-manufacturing, repurposing or IT asset disposing PCs, use PC Builder™ and Pc-Check® suites to quickly and reliably validate inbound and outbound hardware assets for suitability of 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 diverse PC customers. ZeroData™ Windows® securely clears all data, certifiably**

### 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. ZeroData™ Windows® securely clears all data, certifiably.**

## 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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