# PC-Doctor Service Center™ Data Sheet

PC-Doctor Service Center is the diagnostic toolkit used by repair organizations, IT organizations, system builders and other professionals to troubleshoot and isolate hardware issues on servers, desktops, notebooks and netbooks, and verify system integrity. The Service Center Kit includes low-level bootable diagnostics, Windows diagnostics, CD and DVD test media, loopback adapters for serial, parallel, audio, and RJ45 ports, and a professional carrying case. The Service Center Premier Kit also includes a power supply tester and PCI and miniPCI POST cards.

#### What's New?

- Latest Windows OS support
- All new Bootable Diagnostics platform testing outside of the OS with full UEFI support
- New and improved Multipurpose USB Device (MUD)
  - o Faster and with more memory
  - o Run Windows, DOS or Bootable Diagnostics right from the key
  - o Automatically store diagnostic 'Sessions'
- Support for newest Intel and AMD chipsets and CPUs
- Improved SSD support
- Sessions Store test results across diagnostic environments
- Expanded Drive Erase Multi Drive support
- New Windows tests in Service Center 9
  - o 7 new Webcam image quality tests
  - o New sensor device tests to support mobile platforms
  - o New Fingerprint Reader tests
  - o Enhanced multi-point touch testing
  - o Stereoscopic 3D rendering tests
  - o New optical drive tests

## **Hardware and Tests**

The following highlights key hardware support and tests. A complete list is available at <a href="https://www.pcdservicecenter.com/diagnostics.php">www.pcdservicecenter.com/diagnostics.php</a>

## CPU

#### Chipset support:

Support of the latest Intel and AMD chipsets

## **Hardware and Tests Continued**

## **CPU/CoProcessor testing:**

- Instruction Sets MMX, SSE, SSE2, SSE3, SSSE3, SSE4.1, SSE4A, SSE4.2
- Buffer, Cache, Commands, Exceptions, Floating Point Unit, Interrupts, Operations, Prime Number Generation, Registers
- Stress Test

### Memory

Available testing:

- Extended memory
- 17 testing algorithms for maximum coverage
- Low-level testing in protected-mode:
  - o Supports 96GB+
  - o Five testing algorithms that are implementations of research done in conjunction with the University of Nevada, Reno; a white paper is available at <a href="https://www.pc-doctor.com/downloads">www.pc-doctor.com/downloads</a>

## Storage

Supported controllers: PATA, SATA, SCSI, SaS

#### Supported devices:

- Hard drives, solid state drives, USB hard drives, card readers, floppy drives, LS120 drives, zip drives, tape drives
- Optical drives:
  - o Blu-ray/BD-R/BD-RE, HD DVD
  - o CD-ROM/-R/-RW/+R/+RW
  - o DVD-ROM/+R DL/-R DL/+R/-R/RAM/+RW/-RW

## Hardware and Tests Continued

## **Storage Continued**

Available testing:

- S.M.A.R.T. Status and Conveyance Tests, Short and Long Self-Tests, Log Viewer
- Targeted Read Test algorithm created from a hard drive study done in conjunction with an OEM; a case study is available at <a href="https://www.pc-doctor.com/downloads">www.pc-doctor.com/downloads</a>
- Test individual hard drives within RAID configurations
- 39 hard drive, 49 optical drive, 14 floppy drive, 5 LS120 drive, 2 tape drive, 5 zip drive, 2 removable storage

## **System Board**

Supported chipsets: AMD, ATI, Intel, nVidia, SiS, VIA

Available testing:

- BIOS Timer, CMOS, CMOS RAM, RTC
- DMA Channels, IRQ Controller, RAM Refresh, SMBus, System Timer
- PCI, PCIe, miniPCI, miniPCIe, PCMCIA, PCMCIA Detection, CardBus
- IEEE1394, 8042 keyboard controller, USB
- 9 serial port tests
- 4 parallel port tests

#### Multimedia

Verify advanced audio and video capabilities through Windows or basic audio and video capabilities through low-level diagnostics:

- DirectX (support through DX11) and CUDA video cards, video ports
- Audio testing up to 7.1 surround sound
- TV tuner cards analog and digital
- Touch Screen
- WebCam

Available Windows testing:

- 25 video card tests
- 6 TV tuner card tests
- 3 touch screen tests
- 3 sound card tests
- 9 WebCam tests
- 1 video port tests

Available low-level testing:

- 6 video tests
- 1 audio test

# **Hardware and Tests Continued**

#### Communication

Available testing:

- 10 Network tests:
  - o Wired tests (10/100/1000Mb)
  - o Wireless (802.11a/b/g/n)
- Bluetooth test
- 5 Modem tests
- 2 Mobile broadband tests

#### Sensors

**Sensor Devices:** 

- Accelerometer
- Ambient Light Sensor
- Gyrometer
- Magnetometer
- GPS
- Fingerprint Reader

#### Miscellaneous

Available testing:

- Interactive tests:
  - o Alien FX LED Verification
  - o Digitizer Stylus
  - o Keyboard
  - o Joystick
  - o Lid Sensor
  - o Microphone
  - o Monitor
  - o Mouse
  - o Printer
- Windows tests:
  - o Standby
  - o Hibernate
  - o ReadyBoost
- Battery tests

#### **Tools**

#### **Drive Erase**

- Two methods to erase hard drive contents:
  - o Clear writes a single pattern across the entire drive

# **Tools Continued**

- Sanitize writes three patterns across the entire drive and verifies that the last pattern was successfully written (conforms to DoD guideline 5220)
- Stores erasure progress power failures no longer mean starting over
- Erase multiple drives simultaneously

## **System Snapshots**

Snapshots provide a one-click solution to save a detailed system inventory including:

- All hardware devices and their device drivers
- Software OS, virus protection, web browser, Windows startup programs

Compare two system snapshots to visually display all hardware and driver changes – builds customer confidence!

#### **Features**

#### **Automation**

Using built-in command-line functions, you can:

- Launch test scripts or individual tests
- Save test logs and reports

Using batch files, this automation can be strung together to create automated batch mode testing.

## **System Events**

Conveniently locate problems reported by Device Manager or the Windows Event Log including devices without an installed driver, Application Crashes, and OS Crashes (BSOD). BSOD entries with available Windows dump files are analyzed to root cause the device driver that caused the BSOD.

## My Links

Create shortcuts to the most-used utilities, test scripts, or websites. The first five links will be added to the main application screen for easy access.

## **Features Continued**

## Reporting

Create professional, printed reports for your customers that can be saved in HTML or TXT. Customize the report to include:

- Report header with your company's information and logo
- System information a quick summary or a more detailed view
- Tests performed and their Pass/Fail status
- System Snapshot comparisons for more information, see System Snapshots

## **Test Scripts**

Test scripts are sequences of tests that run sequentially or in parallel, which can be saved for reuse. Create scripts in Windows using the visual Script Editor to:

- Perform testing in parallel put extra load on the system, to better locate intermittent issues and speed up test time
- Specify minimum time per test or number of times to run each test
- Customize testing parameters the default values have been set to balance accuracy and speed

#### Sessions

Automatically saves system information, test results and system snapshots to the USB Key:

- Store results from Windows, DOS and Bootable Diagnostics in a common place.
- Organize by customer, system or other parameters.

# Information and Ordering

For more information and to order, visit: www.pcdservicecenter.com

To speak with an account manager, call:

United States: 1-866-289-7237 International: 1-775-336-4000

or email:

sales@pc-doctor.com



Founded in 1993, PC-Doctor Inc. is the global leader in reducing PC supplier costs through diagnostic and system information solutions for top PC makers, service centers and IT organizations. Acknowledged by leading PC manufacturers as the defacto standard for diagnostics, our customers load tens of millions of copies or our software on their systems every year.