

# Service Center 7.5 Data Sheet

PC-Doctor Service Center™ is a 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 that solutions work. The Service Center Kit includes low-level 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, PCI and miniPCI POST cards, and Service Center for Windows PE (includes a Microsoft Windows PE license).

## What's New?

- Windows 7 support
- Support for newest chipsets and CPUs including Core i7 and Phenom II
- Test 64+GB RAM
- Test individual hard drives within RAID configurations
- Faster drive erasing that also verifies a drive is erased
- CUDA-specific video testing
- IPv6 support
- miniPCI POST card
- Diagnostics CD for Windows PE
- New, lower pricing:
  - Service Center Kit - \$329
  - Service Center Premier Kit - \$449
- New Windows tests:
  - Digitizer Stylus Test
  - Hibernate Test
  - ReadyBoost Test
  - Network Data Transfer Verification Test
  - 11 CUDA video tests
  - Battery Status Test
- New low-level tests:
  - System Load Test
  - Protected-mode Memory Random Pattern Test

## Hardware and Tests

The following highlights key hardware support and tests. A complete list is available at [www.pcdservicecenter.com](http://www.pcdservicecenter.com).

### CPU

Key chip support:

- Intel – Atom, Celeron, Celeron D, Celeron M, Core Duo, Core i5, Core i7, Core 2 Duo, Core 2 Quad, Pentium, Pentium II, Pentium III, Pentium IV, Pentium D, Pentium E, Pentium EE, Pentium M, Xeon and others

## Hardware and Tests Continued

- AMD – Athlon 64, Athlon 64 X2, Athlon II, Athlon X2, Athlon 4-series, Athlon 6-series, K6, K7, K8, Opteron, Phenom II, Phenom FX, Phenom X3, Phenom X4, Sempron and others

CPU/CoProcessor testing:

- Instruction Sets – MMX, SSE, SSE2, SSE3, SSSE3, SSE4.1, SSE4A, SSE4.2
- Buffer, Cache, Commands, Exceptions, Interrupts, Multi-core, Operations, Registers
- Stress Test

### Memory

Available testing:

- Base and extended memory
- Low-level testing in protected-mode:
  - Supports 64GB+
  - Five testing algorithms that are implementations of research done in conjunction with the University of Nevada, Reno; a white paper is available at [www.pc-doctor.com](http://www.pc-doctor.com)
- DIMM EEPROM ID – talks directly with DIMM memory modules, verifying valid checksums and ensuring the EEPROM's are write-protected
- 21 testing algorithms to ensure maximum coverage

### Storage

Supported controllers: PATA, SATA, eSATA, SCSI, SaS

Supported devices:

- Card readers, floppy drives, hard drives, LS120 drives, tape drives, USB hard drives, zip drive
- Optical drives:
  - Blu-ray/BD-RE, HD DVD
  - CD-ROM/-R/-RW/+R/+RW
  - DVD-ROM/+R DL/-R DL/+R/-R/RAM/+RW/-RW

## Hardware and Tests Continued

### Storage Continued

Available testing:

- S.M.A.R.T. Log Viewer, Status and Conveyance Tests, Short and Long Self-Tests
- 32 hard drive, 41 optical drive, 5 floppy drive, 5 LS120 drive, 2 tape drive, 5 zip drive

### System Board

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

Available testing:

- BIOS Timer, CMOS, CMOS RAM, RTC
- DMA Channels, IRQ Controller, RAM Refresh, Rambus, SMBus, System Timer
- PCI, PCIe, miniPCI, miniPCIe, PCMCIA, 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 DX10) and CUDA video cards
- Audio testing up to 7.1 surround sound
- TV tuner cards – analog and digital
- Touch screen

Available Windows testing:

- 23 video card tests
- 6 TV tuner card tests
- 3 touch screen tests
- 3 sound card tests

Available low-level testing:

- 4 video tests
- 2 sound tests

### Communication

Supported devices:

- Network cards:
  - Wired – 10/100/1000Mb
  - Wireless – 802.11a/b/g/n
- Bluetooth
- Modems

## Hardware and Tests Continued

Available testing:

- 11 network tests:
  - 3 wired tests
  - 3 wireless tests
- Bluetooth port test
- 5 modem tests

### Miscellaneous

Available testing:

- Interactive tests:
  - Digitizer Stylus
  - Keyboard
  - Joystick
  - Microphone
  - Monitor
  - Mouse
  - Printer
- Windows tests:
  - Standby
  - Hibernate
  - ReadyBoost
- Battery tests

### Tools

#### Drive Erase

- Two methods to securely erase hard drives:
  - Clear – writes a single pattern across the entire drive
  - Sanitize – writes three patterns across the entire drive and verifies that the last pattern was successfully written (conforms to DoD specification 5220)
- Stores erasure progress - power failures no longer mean starting over
- After erasing, a screen is displayed that says, “This drive has been successfully erased by PC-Doctor”

#### 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 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.

### 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.

### 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
- 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



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 de facto standard for diagnostics, PC-Doctor has shipped more than 180 million units worldwide.