toolstar®testLX

The outstanding test software for PC, Server and Notebook





- Self-booting, independent of operating system
- Detailed tests of all important components
- Freely configurable burn-in tests for complete automation
- Tests with up to 100% system load
- Meaningful protocols with your logo prove the work done
- Optimal tool for technology and output control
- Regular updates for your security
- Bootable from USB stick and DVD

"... calculated on an eight-hour day, the use of toolstar "testLX saves 72 minutes per workstation,"

Mattias Wilke, Production Manager, Geodis Logistics Germany GmbH

"The use of software-supported fault diagnosis relieves technicians, shortens throughput times and increases the quality of fault diagnosis. This reduces costs and increases sales at the same time"

Stefan Kanthak, Technical Manager Expert Bening

"The audit results and the versatility of the possible outputs even exceed the expectations of our authorities, so we can deliver the outputs directly with our audit documents."

Martin Zenkert, HW Support /
HW Ressources- and ITIL

Management, DAIICHI

Optional supplement:

SANKYO EUROPE Ltd.

toolstar®shredderLX

For the secure and irretrievable deletion of your data. Wipes according to the most important German and international security standards. You receive an audit-proof deletion certificate for each individual disk.

The toolstar®shredderLX is available as a module (test, delete, inventory and log in one step) for

toolstar®testLX or as a stand-alone version.

toolstar®testLX is a self-booting test software by which any PC can be reliably checked for errors independent of the installed operating system. In order to find sporadic errors, freely definable endurance tests are available. All important components of the PC, server and notebook can be tested directly and precisely for errors. All results are written in individually configurable protocols, which can be configured according to your requirements and stored on a USB stick or in the network. toolstar®testLX is updated every two to three months to the current state of the art so that the investment is also worth while in the future. In addition to new hardware components, new tests are implemented time and again to make your work easier.

Your advatages with toolstar testLX

- You save time and money in support
- 3 minutes net effort for detailed audit, complete hardware tests and individual logging with your logo.
- Your support becomes more efficient and calculable.
- The appearance with the customer looks professional
- Great time savings with sporadic errors
- You can also integrate your own tools and drivers
- Linux servers can even be tested in the background
- No need to replace components, no more "trial and error"

Tests Overview

Extensive memory tests, SPD-EEPROM, cache, write, read and mechanical tests for hard disks, tests for motherboard, high load, stress and cache tests for CPUs, graphics, 3D and memory tests, network tests, tests for CD, DVD and USB drives, interface tests (serial, parallel, USB) with optional test plugs, tests for keyboard, mouse. Freely configurable endurance tests, tests can be executed simultaneously. Detects the latest hardware and processors.



One Year Licence

Our software is available as an annual license.

The annual license is automatically extended by 1 year and can be cancelled up to six weeks before the end of the license period. Just send us an e-mail. The extension includes all updates and free technical support. Please see our current price list for prices.

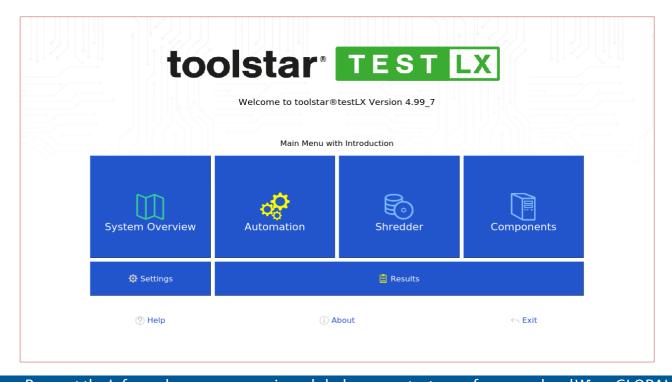
Request the Info-package on <u>www.wipe-global.com</u> contact us or from your local Wipe-GLOBAL Partner.

toolstaretestLX - new features v4/v5

Revision 2019-05-03, wipe-global.com, FW



- New tile view at startup incl. special shredder dialog
- Windows look & feel
- True 64-Bit architecture
- Wireless support
- Select supported languages directly in testLX
- Improved use on touchscreen products
- Improved overview, control and visualization of running tests
- Improved online help and "bubble help", self-explaining GUI
- Hot plug function for storage devices (USB-Sticks, HDDs, ...)
- Stress testing in groups (simultaneous execution of combined single tests)
- Run multiple instances of testLX within one boot process
- 3D graphics benchmark
- New kernel with very recent drivers
- Faster display of large and long test reports or info pages
- shredderLX displays recommended method for shredding
- OpenGL graphics benchmark also with option to select card (internal/external)
- Adjustments for display on small monitors (tablets, etc.)
- New visual battery status indicator in the upper right corner of the toolbar
- New values for system overviews (Mainboard, SPD-EEPROM)
- Drive test incl. wipe can now be run on SSD+HDD, SSD only or HDD only.
- New Registration Tool "Licinger" for administration of customer account, licences and personal files
- Automated download of customized product image for stick after registration/activation
- Optimized download speed for "product only" update (without linux kernel)
- Many minor bugs fixed and general stability improved
- Correction for various SMART values for hard disks



Request the Info-package on <u>www.wipe-global.com</u> contact us or from your local Wipe-GLOBAL Partner.

toolstaretestLX - detailed description

Revision 2019-05-03, wipe-global.com, FW



Simultaneous testing

Test the most important components simultaneously, especially to find sporadic errors faster Stress tests in groups.

Endurance tests / automated tests ("burnin tests")

All test sequences can be fully automated. Individually configurable test compilations. Optional pop-ups for individual user input for test series.

Repetitions of the individual tests, number of individual tests, maximum test duration of the individual components, repetitions of the defined endurance test, total duration of the test series, termination of the endurance test after reaching the set error number, signal on error, final and/or permanent protocol with automatic storage/ printing of the test report. Various setting options for individual adaptation of the endurance tests.

Configured endurance tests can be saved and then either restarted from the menu at any time or start automatically with program start.

Minimum numbers for drives, graphics cards, interfaces, can be defined. Endurance tests can be carried out simultaneously in groups. Group definition by users choice.

Test reports / protocols

Test reports and endurance test protocols can be stored locally on a USB stick or in the network or printed.

Test sequence protocol, test summary with configurable detail levels, permanent protocol, optionally with one-sided or individually configurable system overview. Many components with serial numbers. File names of test reports manually or automatically by serial number, MAC address, system name.

Cyclic hardware monitoring possible in test report (temperatures, fan speeds, voltages). Comprehensive options for individual configuration of the protocols. Test reports create customer confidence and help you save time. Demonstrably fewer returns and complaints.



Processors

CPU core (registers, stack manipulation, addressing modes, flags, integer arithmetic, BCD operations, bit operations, sequencing, string operations, processor I/O, exceptions), FPU (load and save, instruction set, rounding and truncating, exceptions), MMX unit, 3DNow! and SSE unit (data transfers, packed arithmetic, packed comparisons, data conversion, logical operations, move operations).

CPU details such as Manufacturer, Type, Core, Known Clocks, FSB, Proper Name, Measured Clock, Instruction Sets, Logical CPUs, Hyper-Threading, Address Width, Thermal Monitoring, CPU ID, L1-L3 Cache, Multiprocessor Specification, CPUs/Cores, Mathematical coprocessor, commands and extensions, Streaming SIMD Extensions (SSE...), EIST, XD/

NX, 64-bit extensions, EM64T, VMX, SMX, SVM, PAE, PSE, PSE-36, 1GB Page Size, POPCNT, ABM.

Frequency monitor

For single, dual and quad core processors.

All tests on one, selected or all CPUs.

CPU stress tests for up to 32 CPUs simultaneously (all or selected), with CPU/core status and temperature. CPU cache tests for L1+L2+L3 cache (random pattern, addressing, checkerboard pattern, Windows mode, complementary bits, left-handed bit, also inverse, right-handed bit, also inverse, large complement, distributed access)

Mainboard

Board and BIOS information (manufacturer, ID, version, BIOS date, size, chipsets, system manufacturer, system name, system version, system serial number, board manufacturer, board name, board version, board serial number), PCI device list (PCI-BIOS version, number of PCI buses), details (each Bus-Dev-Fct: Address = Name and manufacturer, device, revision, subsystem ID with manufacturer and device, resources such as IRQ, memory, I/O, and forwarding (bus numbers, memory, prefetch-sp.)., I/O), Capabilities), and Tests (Bus Scan Direct, BIOS: Device search, 16-bit functions, 32-bit functions), plug and play (all nodes), interrupts (number, RM-ISR, PnP name, PCI data), DMA (number, designation, PnP) and CMOS RAM/real-time clock tests (read, write, battery status, checksum), Diagnostic status, clock ticking, alarm, CMOS date, CMOS time, BIOS system time) Hardware monitoring (temperatures, voltages, fan speeds), tests for PC speakers, interrupt controller, DMA controller, system timer and keyboard controller, ...



Memory

Faster, complementary, more in-depth and custom test memory speed.

7 different memory tests: addressing, chessboard pattern, Windows mode, complementary bits, left & right bits, large complements, distributed accesses. CPU Cache Test L1, L2 and L3 Display of possible memory areas up to 192GB.

SMBios/DMI memory module allocation with size, address range, type, shape, socket and position. Reading the SPD EEproms for each memory module found: Manufacturer, serial number, part number, date of manufacture, revision code, size, type, SPD version, SPD size, data width, error detection, physical banks with width, size per bank, rows x columns, CAS latency, min. clock cycle, max. clock pulse rate, Data access time, timing characteristics, voltage, Refresh Rate, Min. Back-to-Back Delay, Burst Lengths, CS Latency, Write Latency, tRP, tRRD, tRCD, tRAS, tIS/tIH Commands and Addresses, tDS/tDH data, checksum.

Interfaces

Serial ports, parallel ports, USB (incl. all intermediate USB hubs).

(Internal loop back test, handshake test, transmit/receive test, controller test, status port test, host controller test and Information (port, manufacturer, name), USB device details, and basic tests (device number, ports, manufacturer), product, register address, manufacturer ID, device ID, interface, serial number, IRQ), bidirectional tests with test plugs.

Modem (COM no., I/O address, local baud rate, basic communication, modem register, analog loopback, carrier signal, dial tones; automatic and interactive tests), network card info with MAC address, PCI, manufacturer, ID, name, chip.

Matching test plugs optional.

Network

Status, integrity, connectivity, internal and external ping, quick tests. Single or multiple cards in the system.

Multiple cards can be connected and tested via patch or external cabling. So you can also test or compare sockets, connectors, switches, etc.

WiFi Support

Graphics + Video RAM

Video memory tests (addressing, chessboard pattern, Windows mode, complementary bits, left & right bits, large complements, distributed accesses), visible memory, test image, basic colors, grayscale, color levels, grid, partially interactive. Each for up to 3 graphics cards in the system.

Manufacturer, Chip, Memory Size, Designation, OEM Name, OEM Version, Product, Supported Video Modes, Monitor details (manufacturer, model, date of manufacture, max. size).

Graphics benchmarks.



Disk drives

Detailed drive overview with type, size, controller, serial number, manufacturer, sectors, revision, model.

Hard disks (P-ATA, S-ATA, AHCI, SCSI, SAS, USB,): Mechanical test & access time with capacity and average access time, sector size; Fast read benchmark with speeds (max, average, min); Read test with speeds, write test (non-destructive); Controller test (Controller RAM diagnosis, Controller drive diagnosis, Internal controller diagnosis); SMART analysis (status, overall evaluation, last self-test, fitness attributes (raw error rate, raw error rate).

Start-up time, Reallocated sectors, Position error rate, Position efficiency, Start-up repetitions, Calibration retry, etc,

Write error rate, performance/info attributes (start/stop cycles, operating time, on/off cycles, temperature, Off-Return Cycles, Rest Zone Cycles, Reallocation Events, Fixed Hardware Errors ECC, unrecoverable error offline, UltraDMA CRC error rate, write error rate, soft read error rate, address mark error rate), error logs,, SMART self-tests (short or detailed); partition table, sector viewer.

Floppy disks and removable media

Mechanical test & access time with capacity and average access time, sector size; Fast read benchmark with speeds (max, average, min); Read test with speeds, write test (non destructive); Controller test (controller RAM diagnostics, controller drive diagnostics, internal controller diagnostics); Partition table, sector viewer, ...

Optical Drives

(CD, DVD, Burner, Combo): Mechanical test & access time with capacity and average access time, sector size; Fast read benchmark with speeds (Max, Average, Min.); Fast read benchmark with speeds (Max, Average, Min.).); read test at speeds, read test with test CD/DVD, CD/DVD burn test, erase CD/DVD-RW; drive details such as type, model, revision, serial number, ATA versions, checksum, current type, total capacity, formatted capacity, formatable capacity, disc capabilities (CD, DVD, DVD+, Blu-Ray Disc, HD DVD-R, -RW, ROM, RAM, R DL), ...), eject, sector viewer,

Suitable test CD, test DVD optional available.

Input devices

Keyboard LEDs and actions check (ASCII, BIOS, event, scan codes, default key), mouse interactive and button tests, touch pads, touch screen

Power Supply

Visual Battery status indicator. Various tests for battery health status.