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DATASHEET

FUJITSU ESPRIMO P9900 0-WATT proGREEN selection DESKTOP PC

THE INNOVATIVE 0-WATT PC

ESPRIMO P9900 0-WATT proGREEN selection

The ESPRIMO P9900 proGREEN selection microtower uses the latest Intel® technology and incorporate the 0-Watt functionality, an up to 89% energy efficient power supply and a switched monitor outlet. This means that it only uses half as much energy as a comparable system which is four years old. This high-end devices combines outstanding quality, functional stability and optimal expandability with optimum manageability and security.

0-WATT PC

Cost savings by completely reducing off-mode losses

- Patented function for 0-Watt power consumption in off and hibernating mode with simultaneous management in a time slot that can be optionally set

ENVIRONMENTALLY CONSCIOUS PRODUCT WITH ENERGY STAR 5.0 CERTIFICATION

Your contribution to environmental protection for the continued existence of our planet

- Halogen-free mainboard, sophisticated product concept for the entire lifecycle

HIGHEST ENERGY EFFICIENCY COUPLED WITH INTELLIGENT PERFORMANCE

The best-in-class regarding power consumption combined with new levels of performance

- State-of-the-art Intel® Core™ processors with Turbo Boost and hyperthreading technology and a power supply with up to 87% efficiency

SYSTEM MANAGEMENT

Easy system administration for complex IT infrastructure

- Intel® vPro™ technology

SILENT OPERATION

Pleasant working environment due to an extremely quiet system

- Innovative hardware design, optimized fan concept



COMPONENTS

PROCESSOR	Intel® Core™ i5 processor i5-650 (2C/4T, 3.20 GHz, 4 MB, Intel® HD Graphics)
OPERATING SYSTEM	Windows® 7 Home Premium
Operating system optional preinstalled	Windows® 7 Professional
MEMORY MODULES	2 GB (1 module(s) 2 GB) DDR3, unbuffered, non-ECC, 1333 MHz, PC3-10600, DIMM
HARD DISK DRIVES (INTERNAL)	SATA II, 7200 rpm, 500 GB, 3.5-inch, S.M.A.R.T. SATA II, 7200 rpm, 320 GB, 3.5-inch, S.M.A.R.T.
Hard disk notes	Supporting NCQ and 3 GBit
MODULAR BAY OPTIONS	DVD Super Multi, SATA I
BASE UNIT	ESPRIMO P9900 0-Watt
MAINBOARD	
Mainboard type	D2912
Formfactor	µBTX
Chipset	Intel® Q57
Processor socket	LGA 1156
Processor quantity maximum	1
System bus (FSB / HT / QPI)	up to 1333 MHz
Memory slots	4 DIMM (DDR3)
Supported capacity RAM (max.)	16 GB
Memory frequency	1333 MHz
Memory notes	Dual channel support. For dual channel performance, identical memory modules in each channel are necessary (minimum 2 modules).
LAN	10/100/1000 MBit/s Intel® 82567 LM
BIOS version	Phoenix 6.0
BIOS features	BIOS Flash EPROM update by software Recovery BIOS
Audio codec	Realtek ALC663
Audio features	Internal speaker supports audio playback, High Definition audio, 5.1 surround sound
I/O CONTROLLER ON BOARD	
Serial ATA total	4
thereof eSATA	2 (optional)
Controller functions	Serial ATA II NCQ and 3 GBit AHCI Raid 1/0
INTERFACES	
Audio: line-in	1
Audio: line-in / microphone	1
Audio: line-out	1
Front audio: microphone	1
Front audio: headphone	1
USB 2.0 total	14
USB front	2
USB rear	8
USB internal	4
VGA	via DVI to VGA adaptor (included for onboard graphics only)
DisplayPort	1 (for onboard graphics only)
DVI	1 (for onboard graphics only)
Serial (RS-232)	1 (9pin, 16 byte FIFO, 16550 compatible)
Mouse / Keyboard (PS/2)	2
Ethernet (RJ-45)	1
Parallel	optional (25pin with EPP and ECP)

INPUT DEVICE / COMPONENTS

Optical USB tilt wheel mouse
Optional: Optical USB/PS2 tilt wheel mouse

DRIVE BAYS

Drive bays total 6
3.5-inch internal bays 2
3.5-inch external bays 2
5.25-inch external bays 2

SLOTS

PCI-Express 2.0 x16 1 x (230 mm) FlexySlot
PCI-Express 2.0 x4 (mech. x16) 1 x (230 mm) full height
PCI (32-bit / 33 MHz) 2 x (170 / 315 mm) full height

GRAPHICS ON BOARD

Shared video memory up to 1759 MB
Refresh rate 1024 x 768 (recommended / max.) 85 Hz / -
Refresh rate 1280 x 1024 (recommended / max.) 85 Hz / -
Refresh rate 1600 x 1200 (recommended / max.) 85 Hz / -

TFT resolution (VGA) 1360 x 768 pixel
1440 x 900 pixel
1600 x 900 pixel
1680 x 1050 pixel
1920 x 1080 pixel
1920 x 1200 pixel

TFT resolution (DVI) 1360 x 768 pixel
1440 x 900 pixel
1600 x 900 pixel
1680 x 1050 pixel
1920 x 1080 pixel
1920 x 1200 pixel

TFT resolution (Display Port) 1360 x 768 pixel
1440 x 900 pixel
1600 x 900 pixel
1680 x 1050 pixel
1920 x 1080 pixel
1920 x 1200 pixel
2560 x 1440 pixel
2560 x 1600 pixel

Graphics features DirectX 10
HDCP support
OpenGL® 2.1

Graphics notes Graphics controller integrated in dual-core processors. For quad-core processors graphics card is mandatory.
Tested resolutions, depending on display type additional resolutions and frequencies possible
Shared memory depending on main memory size and operating system
Resolution (color depth up to 32 Bit/pixel)
For TFT we recommend using 60Hz

ELECTRICAL VALUES

Power efficiency note power supply efficiency (at 230V; 20% / 50% / 100% load) : 86% / 89% / 87%
0-Watt mode automatically

Rated voltage range 100 - 240 V

Rated frequency range 50 - 60 Hz

Operating voltage range 90 - 264 V

Operating line frequency range 47 - 63 Hz

Max. output of single power supply 250 W

Power factor correction/active power active

Monitor outlet Switched

POWER CONSUMPTION

Power consumption note	See white paper Energy Consumption 0-Watt mode automatically
Link to Energy White Paper	http://docs.ts.fujitsu.com/dl.aspx?id=1c12084a-5b8b-4839-84b5-2c269e4aa4e0

HEAT DISSIPATION

Heat dissipation notes	See white paper Energy Consumption
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NOISE FOR STANDARD CONFIGURATION (HDD, ODD, FDD)

Noise emission	According to ISO9296
Related Processors for noise	Intel® Core™ i5-670 ; Intel® Core™ i7-860 including NVIDIA® Geforce® 9500GS
Noise Operation mode 1: ODD load (Blue angel requirement)	4.4 B / 29 dB(A) ; 4.4 B / 29 dB(A)
Noise Operation mode 2: HDD load (Blue angel requirement)	3.7 B / 21 dB(A) ; 3.6 B / 21 dB(A)
Noise Operation mode 3: CPU 90% load (Blue angel requirement)	3.9 B / 24 dB(A) ; 3.9 B / 24 dB(A)
Noise Operation mode 4: High load	3.9 B / 23 dB(A) ; 3.9 B / 24 dB(A)
Noise Operation mode 5: Office applications	3.8 B / 22 dB(A) ; 3.6 B / 20 dB(A)
Idle mode (Blue Angel requirement)	3.7 B / 20 dB(A) ; 3.6 B / 20 dB(A)
Noise notes / description	A weighted sound power level L _{wad} (in B) / workplace related A-weighted sound pressure level L _{pAm} (in dB(A)), Bystander position

DIMENSIONS / WEIGHT / ENVIRONMENTAL

Dimensions (W x D x H)	203 x 390 x 392 mm
Operating position	Vertical
Weight	approx. 12 kg
Weight notes	Actual weight may vary depending on configuration
Operating ambient temperature	10 - 35°C

COMPLIANCE

Product	ESPRIMO P9900
Model	MI3W-D2912
Germany	Blauer Engel / Blue Angel in progress GS optional
Europe	CE Nordic Swan in progress
USA/Canada	FCC Class B cCSAus
Global	RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronic equipment) Microsoft Operating Systems (HCT / HCL entry / WHQL) ENERGY STAR® 5.0 in progress EPEAT® in progress
Compliance link	https://sp.ts.fujitsu.com/sites/certificates/default.aspx

OPERATING SYSTEM

Operating system compatible	Linux
Operating system notes	All Windows Vista® and Windows® 7 versions are Office 2007 ready.

ADDITIONAL SOFTWARE

Additional software (preinstalled)	Office 2010 starter Nero Essentials S (burning software)
Additional software (optional)	Recovery DVD for Windows® Drivers & Utilities DVD (DUDVD) CyberLink PowerDVD BD (playback software for Blu-ray Disc™, only with Blu-ray Disc™ drive)

MISCELLANEOUS

Thermal management

COMPATIBILITY (REFERENCES)

DMI 2.0
PC 2001
WMI 1.5
USB 2.0

MANAGEABILITY

Manageability features ASF 2.0 (Alert Standard Format)
DeskUpdate Driver management
DeskView Migrate (optional)
DeskView Control (optional)
PXE 2.1 Boot code
BootP Boot Code including Bootmanage Administrator Software (tested)
Wake up from S5 (off mode)
Intrusion switch (optional)
iAMT 6.0

Manageability type DeskView 10.x client management including:

DeskView features On/Offline remote client management
Detailed system inventory management and reports
BIOS Management
Remote power management
System notifications
Advanced alerts (ASF implementation)
Security Remote Control
DeskView Helpdesk Integration
WoL (Wake on LAN)

SECURITY

Physical security Kensington Lock support
Eye for padlock
Optional: Integrated cabinet lock

System security Boot sector virus protection
Write protect option for the Flash EPROM
Embedded security (TPM 1.2)
Control of all USB interfaces
External USB ports can be disabled separately
Control of external interfaces

User security User and supervisor BIOS password
SystemLock 2 BIOS SmartCard Security
Hard disk password
Optional: Access protection via external SmartCard reader
Optional: Access protection via internal SmartCard reader

SERVICEABILITY

FlexySlot
EasyFix
EasyChange for HDD
EasyChange for optical drives

PACKAGING INFORMATION

Packaging dimension 500x290x540 mm
Max. quantity / pallet 24
Material - Weight (g) Carton 1270 g
Material - Weight (g) EPS / PS 230 g
Material - Weight (g) PE appr. 60 g
Packaging notes printed user documentation is bleached in chlorine free process

WARRANTY

MAINTENANCE AND SUPPORT SERVICES - THE PERFECT EXTENSION

Recommended Service 5x9, Response Time: Next Business Day
Spare Parts availability 5 years
Service Weblink <http://ts.fujitsu.com/Supportservice>

FUJITSU PLATFORM SOLUTIONS

In addition to Fujitsu ESPRIMO P9900 0-Watt, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Dynamic Infrastructures

With the Fujitsu Dynamic Infrastructures approach, Fujitsu offers a full portfolio of IT products, solutions and services, ranging from clients to datacenter solutions, Managed Infrastructure and Infrastructure as-a-Service. How much you benefit from Fujitsu technologies and services depends on the level of cooperation you choose. This takes IT flexibility and efficiency to the next level.

Computing Products

www.fujitsu.com/global/services/computing/

Software

www.fujitsu.com/software/

MORE INFORMATION

Learn more about Fujitsu ESPRIMO P9900 0-Watt, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
<http://ts.fujitsu.com/ESPRIMO>

FUJITSU GREEN POLICY INNOVATION

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment. Using our global know-how, we aim to resolve issues of environmental energy efficiency through IT. Please find further information at <http://www.fujitsu.com/global/about/environment/>



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