

# Data Sheet

## FUJITSU Desktop ESPRIMO Q520

### The Mini with More PC per cm<sup>3</sup>

The FUJITSU ESPRIMO Q520, featuring full desktop PC functionality in a stylish and compact housing, is a real eye-catcher on your desk. Latest generation Intel® Core™ processors deliver the performance to meet your daily office needs. The Zero Noise functionality guarantees silent operation. An integrated 90%-efficient power supply cuts your energy bill. The innovative Low Power Active Mode provides businesses with a wide range of new usage scenarios like telephony and video conferencing. Its compact size and wide range of interfaces make the FUJITSU ESPRIMO Q520 your first choice for locations where space saving is key.

#### An elegant mini PC for challenging office tasks

Eye-catcher on every desk with a modern and exclusive design

- Fully equipped PC with a volume of ~2.0 liters - based on standard desktop technology

#### Always available office PC

Provides businesses with a wide range of new usage scenarios like telephony and video conferencing

- Combines availability with energy saving. The PC looks like it is off but background application tasks can still run in the Low Power Active Mode

#### Made in Germany

Outstanding quality and stable functions based on German production standards

- The development, production and function tests - all under one roof in Germany

#### Superb usability

Pleasant working environment due to a tidy desk

- Horizontal or vertical operations and an integrated VESA mount, service door for easy upgrade of major components

#### Latest technology

Get your office job done fast and reliable

- 4th generation Intel® Core™ processor family



# Components

<b>Processor</b>	<p>Intel® Core™ i7-4785T processor (4 Cores / 8 Threads, 2.20 GHz, up to 3.2 GHz, 8 MB, Intel® HD Graphics 4600) *</p> <p>Intel® Core™ i5-4590T processor (4 Cores / 4 Threads, 2.00 GHz, up to 3.0 GHz, 6 MB, Intel® HD Graphics 4600) *</p> <p>Intel® Core™ i3-4460T processor (4 Cores / 4 Threads, 1.90 GHz, up to 2.7 GHz, 6 MB, Intel® HD Graphics 4600)</p> <p>Intel® Core™ i3-4170T processor (2 Cores / 4 Threads, 3.20 GHz, 3 MB, Intel® HD Graphics 4400)</p> <p>Intel® Pentium® processor G3260T (2 Cores / 2 Threads, 2.90 GHz, 3 MB, Intel® HD Graphics)</p> <p>Intel® Celeron® processor G1840T (2 Cores / 2 Threads, 2.50 GHz, 2 MB, Intel® HD Graphics)</p> <p>*with Intel® Turbo Boost Technology (clock speed and performance will vary depending on workload and other variables)</p>
<b>Operating systems</b>	
<b>Operating system</b>	<p>Windows 8.1 Pro</p> <p>Windows 8.1</p> <p>Windows 7 Professional 64-bit</p> <p>Windows 7 Professional 32-bit</p>
<b>Operating system compatible</b>	<p>Windows 10 Pro (license + recovery media only)</p> <p>openSUSE Linux</p>
<b>Memory modules</b>	<p>2 GB (1 module(s) 2 GB) DDR3, non-ECC, 1,600 MHz, PC3-12800, SO DIMM</p> <p>4 GB (1 module(s) 4 GB) DDR3, non-ECC, 1,600 MHz, PC3-12800, SO DIMM</p> <p>8 GB (1 module(s) 8 GB) DDR3, non-ECC, 1,600 MHz, PC3-12800, SO DIMM</p>
<b>Hard disk drives (internal)</b>	<p>HDD SATA II, 5,400 rpm, 500 GB, 2.5-inch*</p> <p>SSD SATA III Premium, 512 GB, 2.5-inch</p> <p>SSD SATA III Premium, 256 GB, 2.5-inch</p> <p>SSD SATA III Premium, 128 GB, 2.5-inch</p> <p>SSD SATA III, 256 GB, 2.5-inch</p> <p>SSD SATA III, 128 GB, 2.5-inch</p> <p>SSD SATA III, 256 GB, 2.5-inch, SED</p> <p>SSD SATA III, 128 GB, 2.5-inch, SED</p> <p>SSHD SATA III, 5,400 rpm, 500 GB, 2.5-inch</p> <p>HDD SATA III, 5,400 rpm, 320 GB, 2.5-inch, enhanced availability</p> <p>HDD SATA III, 7,200 rpm, 500 GB, 2.5-inch</p> <p>HDD SATA III, 7,200 rpm, 320 GB, 2.5-inch</p> <p>HDD SATA II, 5,400 rpm, 1,000 GB, 2.5-inch*</p> <p>HDD SATA II, 5,400 rpm, 320 GB, 2.5-inch*</p>
<b>Hard disk notes</b>	<p>Up to 20 GB of HDD space is reserved for system recovery</p> <p>SSHD (Solid State Hard Disk, Hybrid drive)</p> <p>SSD (Solid State Disk)</p> <p>SED (Self-Encrypting Drive)</p>
<b>Graphics</b>	<p>DP to DVI-D (single link) Adapter Cable</p>
<b>Drives (optional)</b>	<p>BD Triple Writer SATA Slot-in slim</p> <p>DVD Super Multi Slot-in slim</p>
<b>Interface add on cards/components (optional)</b>	<p>WLAN 802.11 a/g/n (2x2) and Bluetooth (dedicated regions only, not for Indonesia)</p>

## Base unit

Base unit	ESPRIMO Q520
<b>Mainboard</b>	
Mainboard type	D3223
Formfactor	proprietary
Chipset	Intel® H81
Processor socket	LGA 1150
Processor quantity maximum	1
Supported capacity RAM (max.)	16 GB
Memory slots	2 SO DIMM (DDR3, 1600 MHz)
Memory frequency	1,600 MHz
Memory notes	Dual channel support. For dual channel performance, a minimum of 2 memory modules have to be ordered. Capacity per channel has to be the same
LAN	10/100/1,000 MBit/s Intel® I217LM
Integrated WLAN	1 (optional with Bluetooth together)
BIOS version	AMI Aptio 4.6
BIOS features	BIOS Flash EPROM update by software Recovery BIOS Unified Extensible Firmware Interface (UEFI)
Audio type	On board
Audio codec	Realtek ALC671
Audio features	Buzzer
<b>I/O controller on board</b>	
Serial ATA total	2
thereof SATA III	2
Controller functions	Serial ATA II (3 Gbit) Serial ATA III (6 Gbit) NCQ AHCI
<b>Interfaces</b>	
Audio: line-out / headphone	1
Audio: line-in / microphone	1
USB 2.0 total	4
USB 3.0 total	2
USB front	2x 3.0
USB rear	4x 2.0
VGA	1 (via DVI to VGA adapter, part of shipment)
DisplayPort	1
DVI	1 (DVI-I)
Ethernet (RJ-45)	1
Multicardreader	1 (SD, MMC)
Interface Module notes	Anytime USB charge functionality
<b>Input device / components</b>	
Input devices (optional)	Optical USB wheel mouse KBPC PX ECO Mouse M440 ECO
<b>Drive bays</b>	
Drive bays total	2
2.5-inch internal bays	1
5.25-inch external bays	1
Drive bay notes	slim slot-in for 5.25"
<b>Graphics on board</b>	
Graphics brand name	Intel® HD Graphics, HD Graphics 4400, HD Graphics 4600 (depending on processor)
Shared video memory	up to 1,782 MB

**Graphics on board**

<b>TFT resolution (VGA)</b>	1,024 x 768 pixel 1,280 x 1,024 pixel 1,360 x 768 pixel 1,440 x 900 pixel 1,600 x 900 pixel 1,600 x 1,200 pixel 1,680 x 1,050 pixel 1,920 x 1,080 pixel
<b>TFT resolution (DVI)</b>	1,280 x 1,024 pixel 1,360 x 768 pixel 1,440 x 900 pixel 1,600 x 900 pixel 1,680 x 1,050 pixel 1,920 x 1,080 pixel 1,920 x 1,200 pixel
<b>TFT resolution (DisplayPort)</b>	1,280 x 1,024 pixel 1,360 x 768 pixel 1,440 x 900 pixel 1,600 x 900 pixel 1,680 x 1,050 pixel 1,920 x 1,080 pixel 1,920 x 1,200 pixel 2,560 x 1,440 pixel 2,560 x 1,600 pixel 3,840 x 2,160 pixel (requires Intel® Core™ i3, i5 or i7 processor)
<b>Graphics features</b>	Dual display support DirectX® 11.1 HDCP support Open CL® 1.2 OpenGL® 4.0 One DisplayPort connector can be converted to DVI-D or HDMI with an optional external adapter
<b>Graphics notes</b>	up to 1 GB dedicated video memory (main memory owned and locked for graphics use) 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**

<b>Power efficiency note</b>	power supply efficiency (at 115V/230V; 10% / 20% / 50% / 100% load) : 83% / 87% / 90% / 88%
<b>Rated voltage range</b>	100 V - 240 V
<b>Rated frequency range</b>	50 Hz - 60 Hz
<b>Operating voltage range</b>	90 V - 264 V
<b>Operating line frequency range</b>	47 Hz - 63 Hz
<b>Max. output of single power supply</b>	65 W (integrated in system)
<b>Power factor correction/active power</b>	No (meets input harmonic current according EN61000-3-2)
<b>Monitor outlet</b>	No

**Power consumption**

<b>Power consumption note</b>	See white paper Energy Consumption
<b>Link to Energy White Paper</b>	<a href="http://docs.ts.fujitsu.com/dl.aspx?id=5000c21d-e2f0-4511-b9c0-9dd01c57b8a4">http://docs.ts.fujitsu.com/dl.aspx?id=5000c21d-e2f0-4511-b9c0-9dd01c57b8a4</a>

**Heat dissipation**

<b>Heat dissipation notes</b>	See white paper Energy Consumption
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**Noise emission**

<b>Related Processors for noise</b>	Intel® Core i7-4765T
<b>Standard noise emission</b>	2x2 GB, HDD, ODD, Windows According to ISO 7779:2010, ECMA-74
<b>Standard noise operation mode: CPU 50% load</b>	tbd

**Noise emission**

<b>Standard noise operation mode: HDD load</b>	3.0 B / 17 dB(A) Bystander ; 19 dB(A) Operator position
<b>Standard noise operation mode: Idle mode</b>	SSD: no noise emission, 2.5" HDD: 3.0 B / 17 dB(A) Bystander ; 17 dB(A) Operator position
<b>Standard noise operation mode: ODD load</b>	4.5 B / 31 dB(A) Bystander ; 34 dB(A) Operator position
<b>Standard noise operation mode: Office applications 2.0</b>	SSD: no noise emission, 2.5" HDD: 3.0 B / 17 dB(A) Bystander ; 18 dB(A) Operator position
<b>Blue angel noise emission according certification</b>	According to ISO 7779:2010, ECMA-74 for max. possible configuration
<b>Blue angel noise operation mode: HDD load</b>	3.2 B = 32 dB
<b>Blue angel noise operation mode: Idle mode</b>	3.1 B = 31 dB
<b>Blue angel noise operation mode: ODD load</b>	4.7 B = 47 dB

**Dimensions / Weight / Environmental**

<b>Dimensions (W x D x H)</b>	185 x 191 x 58.7 mm 7.28 x 7.52 x 2.31 inch
<b>Operating position</b>	Vertical / horizontal (no feet needed)
<b>VESA mount</b>	integrated (100mm), applicable for selected monitors only, additional mounting kit for specific monitors optional
<b>Weight</b>	1.6 kg
<b>Weight (lbs)</b>	3.53 lbs
<b>Weight notes</b>	Weight may vary depending on actual configuration (without ODD)
<b>Operating ambient temperature</b>	10 - 35 °C (50 - 95 °F)
<b>Operating relative humidity</b>	5 - 85 % (relative humidity)

**Compliance**

<b>Product</b>	ESPRIMO Q520
<b>Model</b>	MPC2
<b>Germany</b>	TÜV GS Blauer Engel / Blue Angel
<b>Europe</b>	CE
<b>USA/Canada</b>	FCC Class B cCSAus
<b>Global</b>	RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronic equipment) Microsoft Operating Systems (HCT / HCL entry / WHQL) EPEAT® Gold (dedicated regions) ENERGY STAR® 6.0 (dedicated regions)
<b>Compliance notes</b>	This product is free of polyvinyl chloride (PVC) when ordered with the optional PVC free power cord
<b>Compliance link</b>	<a href="http://globalsp.ts.fujitsu.com/sites/certificates">http://globalsp.ts.fujitsu.com/sites/certificates</a>

**Additional Software**

<b>Additional software (preinstalled)</b>	Workplace Protect (secure authentication solution) Adobe® Reader® (pdf reader) McAfee Multi Access Security (anti-virus and internet security software; 60 days trial version) Win7: Fujitsu Recovery (hard disk based recovery) Win8: Microsoft Push Button Recovery (hard disk based recovery) Microsoft Office (buy license to activate the pre-installed Microsoft Office)
<b>Additional software (optional)</b>	Recovery DVD for Windows® Drivers & Utilities DVD (DUDVD) CyberLink PowerDVD BD (playback software for Blu-ray Disc™) CyberLink PowerDVD DVD (playback software for DVD) Nero Essentials XL

**Manageability**

<b>Manageability technology</b>	DeskUpdate Driver management PXE 2.1 Boot code Wake up from S5 (off mode) WoL (Wake on LAN)
<b>Manageability software</b>	DeskView Client DeskView Instant BIOS Management
<b>DeskView components</b>	Inventory Management BIOS Management Driver Management Security Management Alarm Management
<b>Supported standards</b>	DMI (Desktop Management Interface) SMBIOS (System Management BIOS) PXE (Preboot Execution Environment) WMI (Windows Management Instrumentation) WBEM (Web Based Enterprise Management) CIM (Common Information Model)
<b>Manageability link</b>	<a href="http://www.fujitsu.com/fts/manageability">http://www.fujitsu.com/fts/manageability</a>

**Security**

<b>Physical Security</b>	Kensington Lock support Housing Lock Plate (to use with Kensington lock)
<b>System and BIOS Security</b>	Boot sector virus protection Write protect option for the Flash EPROM Control of external interfaces External USB ports can be disabled separately Embedded security (TPM 1.2) (optional)
<b>User Security</b>	User and supervisor BIOS password Hard disk password Access protection via external SmartCard reader (optional)

**Serviceability****Packaging information**

<b>Packaging dimension (mm)</b>	395 x 198 x 284 mm
<b>Packaging dimension (inch)</b>	15.55 x 7.8 x 11.18 inch
<b>Max. quantity / pallet</b>	84
<b>Material - Weight (g) Carton</b>	670 g
<b>Material - Weight (lbs) Carton</b>	1.48 lbs
<b>Material - Weight (g) EPS / PS</b>	10 g
<b>Material - Weight (lbs) EPS / PS</b>	0.02 lbs
<b>Material - Weight (g) PE</b>	125 g
<b>Material - Weight (lbs) PE</b>	0.28 lbs
<b>Packaging notes</b>	If keyboard is included in packaging: 1.) packaging dimension is increasing to: 500 x 208 x 290mm / (19.69 x 8.19 x 11.42 inch); 2.) material weight of carton will increase to 880g; 3.) max. quantity/pallet = 56; printed user documentation is bleached in chlorin free process;

**Warranty**

<b>Warranty period</b>	1 year (depending on country)
<b>Warranty type</b>	Bring-In / Onsite Service (for countries within region FTS CEMEA&I, for all other countries depending on local regulations, minimum: 1 year material warranty)
<b>Warranty Terms &amp; Conditions</b>	<a href="http://support.ts.fujitsu.com/warranty">http://support.ts.fujitsu.com/warranty</a>

**Product Support Services - the perfect extension**

<b>Recommended Service</b>	9x5, Onsite Response Time: Next Business Day
<b>Spare Parts availability</b>	5 years after end of product life
<b>Service Weblink</b>	<a href="http://www.fujitsu.com/fts/services/support">http://www.fujitsu.com/fts/services/support</a>

# Recommended Accessories

## USB 3.0 Port Replicator PR08



The FUJITSU USB 3.0 Port Replicator PR08 is the perfect solution for hot-desk environments. It connects your notebook to all of your peripherals with a single USB 3.0 plug. The highlight is the internal powerful Display Link chipset that offers an excellent graphic performance.

Order Code: S26391-F6007-L400

## Display B22W-7 LED



The FUJITSU Display B22W-7 LED offers best ergonomics and usability for intensive office use with a 4-in-1 stand.

Order Code: S26361-K1472-V140

## Display B24W-7 LED



The FUJITSU B24W-7 LED Display with excellent ergonomics makes intensive office work extremely comfortable. This highly reliable display offers superb usability and power-saving features to help reduce your labor as well as energy costs. With wide viewing angle technology, flexible connectivity, and easy manageability, the FUJITSU B24W-7 LED Display can help you improve productivity.

Order Code: S26361-K1497-V140

## SOUNDSYSTEM DS E2000 Air



The new more powerful SOUNDSYSTEM DS E2000 Air gives you impressive, well-balanced sound throughout the frequency band. It is an unbeatable USB speaker set with a surprisingly small form factor. The robust satellite speakers are decorated with a deluxe piano finish and the base is adorned with warm ambient lighting.

Order Code: S26391-F7128-L600

## UC&C USB Headset Stereo H650e



The UC&C USB Headset Stereo H650e is the ultimate in style and functionality. Long, uncomfortable work calls are a thing of the past thanks to the cushioned ear pads and crystal clear sound. Adjustable headband and microphone provides the perfect fit for everyone. Optimized for Microsoft® Lync™ the headset displays a red 'in-call' LED to let your co-workers know when you're available, thus helping to boost office productivity.

Order Code: S26391-F7139-L10

## Wireless Keyboard Set LX901



The Wireless Keyboard LX901 is a top of the line desktop solution for lifestyle orientated customers, who want only the best for their desk. This superb keyboard set offers ambitious users more functions, security and better features than a conventional interface device. It even includes 2.4 GHz technology and 128 AES encryption for security.

Order Code: S26381-K565-L4\*\* (\*\*: Country specific variation)

# More information

## Fujitsu OPTIMIZATION Services

In addition to FUJITSU Desktop ESPRIMO Q520, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

### Fujitsu Portfolio

Build on industry standards, Fujitsu offers a full portfolio of IT hardware and software products, services, solutions and cloud offering, ranging from clients to datacenter solutions and includes the broad stack of Business Solutions, as well as the full stack of Cloud offering. This allows customers to leverage from alternative sourcing and delivery models to increase their business agility and to improve their IT operation's reliability.

### Computing Products

[www.fujitsu.com/global/products/computing/](http://www.fujitsu.com/global/products/computing/)

### Software

[www.fujitsu.com/software/](http://www.fujitsu.com/software/)

## More information

Learn more about FUJITSU Desktop ESPRIMO Q520, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.  
[www.fujitsu.com/fts/ESPRIMO](http://www.fujitsu.com/fts/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 contribute to the creation of a sustainable environment for future generations through IT. Please find further information at <http://www.fujitsu.com/global/about/environment>



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