Fujitsu recommends Windows 10 Pro.

# Data Sheet FUJITSU Desktop ESPRIMO D538

### New small form factor PC in a more compact and space-saving design

The new FUJITSU ESPRIMO D538 Desktop PC provides superior expandability features in a smaller chassis design. The latest 8th Gen Intel<sup>®</sup> Core<sup>™</sup> processors (with up to 6 cores and 12 threads) and improved connectivity options in front provide the much-needed performance to meet your daily office needs. Optional security functions, such as the integrated cabinet lock, EraseDisk and SmartCard reader help secure your valuable business data and hardware components. You can easily and freely configure each PC to meet your specific hardware needs as well as customize each PC to satisfy even more complex project requirements. With the ENERGY STAR<sup>®</sup> certification and up to 94%-efficient power supply option, ESPRIMO D538 helps reduce your carbon footprint and energy bill.

### New SFF system with 8l housing and superior expandability

Powerful and cost-effective small form factor PC that enables more space saving

Improved connectivity options that include USB 3.1 gen1, optional SD card and SmartCard reader and VGA connector

### Best energy efficiency coupled with performance

Low power consumption combined with highest levels of performance

■ 8th generation Intel<sup>®</sup> Core<sup>™</sup> processor family, a switched monitor outlet and a power supply with 94% efficiency (optional)

### Manageability and Ease of Use

- "Plug & work" PC that ensures smooth system administration
- Easy to integrate into existing IT landscapes and reliable DeskView manageability tools

### Advanced security

Designed to protect your data and system's hardware components

 Optional EraseDisk, integrated cabinet lock and smartcard reader for greater physical and datalevel security

### Serviceability

Accessing and servicing the system is very easy and convenient due to tool-less chassis design

Tool-less access to housing memory, connectors, ODD and HDD drives and all other components are easily accessible; optional external dust filter for the front panel for harsh, dusty environments







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# Components

		ESPRIMO D538/E94+	
Processor	Intel® Celeron® processor G4900 (2 Cores / 2 Threads, 3.10 GHz, 2 MB, Intel® UHD Graphics 610) Intel® Pentium® Gold G5400 processor (2 Cores / 4 Threads, 3.70 GHz, 4 MB, Intel® UHD Graphics 610) Intel® Core™ i3-8100 processor (4 Cores / 4 Threads, 3.60 GHz, 6 MB, Intel® UHD Graphics 630) Intel® Core™ i5-8400 processor (6 Cores / 6 Threads, 2.80 GHz, up to 4.0 GHz, 9 MB, Intel® UHD Graphics 63 Intel® Core™ i5-8500 processor (6 Cores / 6 Threads, 3.00 GHz, up to 4.1 GHz, 9 MB, Intel® UHD Graphics 63 Intel® Core™ i5-8600 processor (6 Cores / 6 Threads, 3.10 GHz, up to 4.3 GHz, 9 MB, Intel® UHD Graphics 63 Intel® Core™ i5-8600 processor (6 Cores / 12 Threads, 3.20 GHz, up to 4.6 GHz, 12 MB, Intel® UHD Graphics 63		
	*with Intel® Turbo Boost Technology (clock speed and performance will vary depending on workload and other variables)		
Operating systems			
Operating system pre-installed	Windows 10 Pro. Fujitsu recommends Windows 10 Pro. Windows 10 Home	Windows 10 Pro. Fujitsu recommends Windows 10 Pro. Windows 10 Home	
	ESPRIMO D538/E85+	ESPRIMO D538/E94+	
Memory modules	4 GB (1 module(s) 4 GB) DDR4, unbuffered, non-ECC, 2,666 MHz, UDIMM 8 GB (1 module(s) 8 GB) DDR4, unbuffered, non-ECC, 2,666 MHz, UDIMM 16 GB (1 module(s) 16 GB) DDR4, unbuffered, non-ECC, 2,666 MHz, UDIMM	MHz, UDIMM	
	ESPRIMO D538/E85+	ESPRIMO D538/E94+	
Graphics	Entry 3D: NVIDIA® Quadro® P400 , 2 GB, PCIe x16, 3x miniDP Entry 3D: AMD® Radeon R7 340, 2 GB, 1x Dual Link DVI-I, 1x DisplayPort Others: VGA Extension Card	Entry 3D: NVIDIA® Quadro® P400 , 2 GB, PCIe x16, 3x miniDP Entry 3D: AMD® Radeon R7 340, 2 GB, 1x Dual Link DVI-I, 1x DisplayPort Others: VGA Extension Card	
	ESPRIMO D538/E85+	ESPRIMO D538/E94+	
Hard disk drive	HDD SATA II, 5,400 rpm, 500 GB, 2.5-inch HDD SATA III, 7,200 rpm, 1,000 GB, 3.5-inch HDD SATA III, 7,200 rpm, 1,000 GB, 3.5-inch, business critical HDD SATA III, 7,200 rpm, 2,000 GB, 3.5-inch HDD SATA III, 7,200 rpm, 500 GB, 3.5-inch SSD PCIe, 1024 GB M.2 NVMe module SSD PCIe, 1024 GB M.2 NVMe module SSD PCIe, 256 GB M.2 NVMe module SSD PCIe, 256 GB M.2 NVMe module SSD PCIe, 512 GB M.2 NVMe module SSD SATA III, 1024 GB, 2.5-inch SSD SATA III, 256 GB, 2.5-inch SSD SATA III, 512 GB, 2.5-inch	HDD SATA II, 5,400 rpm, 500 GB, 2.5-inch HDD SATA III, 7,200 rpm, 1,000 GB, 3.5-inch HDD SATA III, 7,200 rpm, 1,000 GB, 3.5-inch, business critical HDD SATA III, 7,200 rpm, 2,000 GB, 3.5-inch HDD SATA III, 7,200 rpm, 500 GB, 3.5-inch SSD PCIe, 1024 GB M.2 NVMe module SSD PCIe, 1024 GB M.2 NVMe module, SED SSD PCIe, 256 GB M.2 NVMe module SSD PCIe, 256 GB M.2 NVMe module SSD PCIe, 256 GB M.2 NVMe module SSD PCIe, 512 GB M.2 NVMe module SSD PCIe, 512 GB M.2 NVMe module SSD PCIe, 512 GB M.2 NVMe module SSD SATA III, 1024 GB, 2.5-inch SSD SATA III, 286 GB, 2.5-inch SSD SATA III, 512 GB, 2.5-inch	
Hard disk notes	SSD (Solid State Disk) SED (Self-Encrypting Drive)		
	ESPRIMO D538/E85+	ESPRIMO D538/E94+	
Optical drive	Weight saver DVD Super Multi ultra slim (tray), SATA BD Triple Writer SATA ultra slim (tray), SATA	Weight saver DVD Super Multi ultra slim (tray), SATA BD Triple Writer SATA ultra slim (tray), SATA	

	ESPRIMO D538/E85+	ESPRIMO D538/E94+
Interfaces add on cards / components	WLAN 802.11ac (2x2) PCIe x1 and BT 5 (dedicated regions	WLAN 802.11ac (2x2) PCIe x1 and BT 5 (dedicated regions
	only) WLAN 802.11ac (2x2) PCIe x1 (dedicated regions only)	only) WLAN 802.11ac (2x2) PCle x1 (dedicated regions only)
	Gigabit Ethernet PCle x1	Gigabit Ethernet PCIe x1
	eSATA Interface	eSATA Interface
	Dual serial card PCIe x1	Dual serial card PCIe x1
Base unit	ESPRIMO D538/E85+	ESPRIMO D538/E94+
Mainboard		
Mainboard type	D3600	
Formfactor	proprietary	
Chipset	Intel <sup>®</sup> H310	
Processor socket	LGA 1151	
Processor quantity maximum	1	
Supported capacity RAM (max.)	32 GB	
Memory slots	2 DIMM (DDR4)	
Memory frequency	2,666 MHz	
Memory notes	Dual channel support	
	For dual channel performance, 2 memory modules have to be ordered. Capacity per channel has to be the same. 2666 MHz may be clocked down to 2400 or 2133 depending on used processor	
LAN	10/100/1,000 MBit/s Realtek RTL8111G	
BIOS version	AMI Aptio V UEFI Specification 2.6	
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	Internal speaker supports audio playback (optional), High [	Jefinition audio, 5.1 surround sound
I/O controller on board		
Serial ATA total	3	
thereof SATA III	3	
thereof eSATA	1	
Controller functions	Serial ATA III (6 Gbit) NCQ	
	AHCI	
Interfaces		
Audio: line-in	1	
Audio: line-out	1	
Front audio: microphone	1	
Front audio: headphone	1	
USB 2.0 total	6	
USB 3.1 Gen1 (USB 3.0) total	6 4	
USB 3.1 Gen2 total	1 optional via add on card	
USB front	2x USB 2.0; 2x USB 3.0	
USB rear	2x USB 2.0; 2x USB 3.0 2x USB 2.0; 2x USB 3.0; optional: additional 1x USB 3.1 Type C (Gen2) via add on card	
USB internal	2x USB 2.0; 2x USB 3.0; optional: additional 1x USB 3.1 Type C (uen2) via add on card 2x USB 2.0	
VGA	optional: via adapter card	
DisplayPort		
υισμαγευτι	1	
	1 (DV/LD)	
DVI Mouse / Keyboard (PS/2)	1 (DVI-D) 2	

Interfaces	
eSATA	1 (optional)
Interface Module notes	Anytime USB charge functionality
Input device / components	
Input devices (optional)	Keyboard
F (.F /	Mouse
	KBPC PX ECO
	Mouse M440 ECO
Drive bays	
2.5-inch bays	1
3.5-inch internal bays	1
5.25-inch external bays	1
Drive bay notes	5,25" bay: for slim optical disc drive only; 3.5" bay for 1x 3.5" drive (screwless) or optional via adapter for 1x or 2x 2.5" drives (screwless); 2.5" bay for 1x 2.5" drive (screws)
M.2-2280	1 x on mainboard for SSD NVMe (PCIe 2.0 x2; up to 10Gbit/s)
Slots	
PCI-Express 3.0 x16	1 x (174 mm / 6.85 inch) Low profile
PCI-Express 2.0 x4 (mech. x16)	1 x (174 mm / 6.85 inch) Low profile
Graphics on board	
Graphics brand name	Intel® UHD Graphics 610, Intel® UHD Graphics 630
Shared video memory	Up to half size of total system memory
TFT resolution (VGA)	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
TFT resolution (DVI)	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
TFT resolution (DisplayPort)	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
	3,440 x 1,440 pixel
	3,840 x 2,160 pixel
	4,096 x 2,304 pixel
Graphics features	Dual display support
	DirectX® 12
	HDCP support OpenCL™ 2.0 (requires Intel® Core™ i3, i5 or i7 processors)
	OpenGL® 4.4
	For multi monitoring mode, graphics card and integrated graphics run in parallel
	DisplayPort interface supports Ver. 1.2 incl. Multi-Stream
	DVI-D interface supports audio output for HDMI monitors

Graphics on board		
Graphics notes	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	
Base unit	ESPRIMO D538/E85+	ESPRIMO D538/E94+
Electrical values		
Power efficiency note	power supply efficiency at 10% / 20% / 50% / 100% load for 230V: 80% / 85% /88% / 87%; for 115V: 79%/ 84%/ 87%/ 84%	power supply efficiency at 10% / 20% / 50% / 100% load fo 230V: 87% / 91% / 94% / 93%; for 115V: 86%/ 90%/ 92%/ 90%
Rated voltage range	100 V - 240 V	100 V - 240 V
Rated frequency range	50 Hz - 60 Hz	50 Hz - 60 Hz
Operating voltage range	90 V - 264 V	90 V - 264 V
Operating line frequency range	47 Hz - 63 Hz	47 Hz - 63 Hz
Max. output of single power supply	210 W	280 W
Power factor correction/active power	active	active
Nonitor outlet	No	Switched
Base unit	ESPRIMO D538/E85+	ESPRIMO D538/E94+
Power consumption		
Power consumption note	See white paper Energy Consumption	
•		
Noise emission		
Related Processors for noise	Intel® Core™ i7 8700	Intel® Core™ i7 8700
Standard noise emission	2x4 GB, HDD, ODD, Windows According to ISO 7779:2010, ECMA-74	2x4 GB, HDD, ODD, Windows According to ISO 7779:2010, ECMA-74
Standard noise notes / description	A-weighted sound power level Lwad (in B) / Workplace related A-weighted sound pressure level LpAm (in dB(A))	A-weighted sound power level Lwad (in B) / Workplace related A-weighted sound pressure level LpAm (in dB(A))
Standard noise operation mode: CPU 50% load	3.5 B / 22 dB(A) Bystander; 24 dB(A) Operator position	3.5 B / 21 dB(A) Bystander; 23 dB(A) Operator position
Standard noise operation mode: HDD load	3.4 B / 21 dB(A) Bystander; 23 dB(A) Operator position	3.5 B / 21 dB(A) Bystander; 24 dB(A) Operator position
Standard noise operation mode: Idle mode	3.4 B / 21 dB(A) Bystander; 23 dB(A) Operator position	3.4 B / 20 dB(A) Bystander; 21 dB(A) Operator position
Standard noise operation mode: ODD load	4.5 B / 32 dB(A) Bystander; 36 dB(A) Operator position	4.5 B / 31 dB(A) Bystander; 36 dB(A) Operator position
Standard noise operation mode: Office applications 2.0	3.4 B / 21 dB(A) Bystander; 23 dB(A) Operator position	3.4 B / 21 dB(A) Bystander; 22 dB(A) Operator position
Dimensions / Weight / Environmental		
Dimensions (W x D x H)	313 x 286 x 89 mm	
	12.32 x 11.26 x 3.51 inch	
Operating position	horizontal / vertical (optional, feet needed)	
Veight	5 kg	
Veight (lbs)	11.03 lbs	
Veight notes	Actual weight may vary depending on configuration	
) perating ambient temperature	10 - 35 ℃ (50 - 95 °F)	
Dperating relative humidity	5 - 85 % (relative humidity)	
Compliance		
Product	ESPRIMO D538/E85+	ESPRIMO D538/E94+
Model	DTL	
Germany	GS (planned)	
Еигоре	CE	

Compliance		
USA/Canada	FCC Class B cTUVus	
Global	RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronic equipment) Microsoft Operating Systems (HCT / HCL entry / WHQL) ENERGY STAR® in progress EPEAT® in progress (dedicated regions)	
China	CCC (planned) CCC (depending on configuration) CEL (Chinese energy label) TPM 2.0 for China (optional)	
Compliance link	https://sp.ts.fujitsu.com/sites/certificates	
Additional Software		
Additional software (preinstalled)	Adobe® Reader® (pdf reader) McAfee Multi Access Security (anti-virus and internet security software; 60 days trial version) Microsoft Office (buy license to activate the pre-installed Microsoft Office)	
Additional software (optional)	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	
Base unit	ESPRIMO D538/E85+	ESPRIMO D538/E94+
Security		
Physical Security	Kensington Lock support Eye for padlock Integrated cabinet lock (optional)	Kensington Lock support Eye for padlock Integrated cabinet lock (optional)
System and BIOS Security	Embedded security (TPM 2.0) EraseDisk (optional) Credential Guard Ready and Device Guard Capable (Windows 10, v. 1709) Boot sector virus protection Write protect option for the Flash EPROM Control of all USB interfaces External USB ports can be disabled separately Control of external interfaces	Embedded security (TPM 2.0) EraseDisk (optional) Credential Guard Ready and Device Guard Capable (Windows 10, v. 1709) Boot sector virus protection Write protect option for the Flash EPROM Control of all USB interfaces External USB ports can be disabled separately Control of external interfaces
User Security	User and supervisor BIOS password Hard disk password Access protection via external SmartCard reader (optional) Access protection via internal SmartCard reader (optional) Workplace Protect (secure authentication solution)	User and supervisor BIOS password Hard disk password Access protection via external SmartCard reader (optional) Access protection via internal SmartCard reader (optional) Workplace Protect (secure authentication solution)
Workplace Embedded Tools	Auto BIOS Update via Fujitsu Server Auto BIOS Update via customer server Easy PC Protection	Auto BIOS Update via Fujitsu Server Auto BIOS Update via customer server Easy PC Protection
Manageability		
Manageability technology	DeskUpdate Driver management PXE 2.1 Boot code Wake up from S5 (off mode) Intrusion switch (optional) WoL (Wake on LAN)	
Manageability software	DeskView Client DeskView Instant BIOS Management	
DeskView components	BIOS Management incl. Security Inventory Management Driver Management Alarm Management	

Manageability			
Supported standards	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)		
Manageability link	http://www.fujitsu.com/fts/manageability		
Miscellaneous			
	Keyboard on (Special Fujitsu keyboard required)	Keyboard on (Special Fujitsu keyboard required)	
	Keyboard on with one key (KBPX Eco, KB521)	Keyboard on with one key (KBPX Eco, KB521)	
	Keyboard on with 2 keys (CTRL+CTRL) with PS2 or special	Keyboard on with 2 keys (CTRL+CTRL) with PS2 or specia	
	USB keyboards	USB keyboards	
	Keyboard on with any key (USB)	Keyboard on with any key (USB)	
	Thermal management	Thermal management	
Warranty			
Warranty period	1 year (for countries in EMEIA)	1 year (for countries in EMEIA)	
Warranty type	Bring-In / Onsite Service (for countries within region EMEI/	Bring-In / Onsite Service (for countries within region EMEIA, for all other countries depending on local regulations)	
Warranty Terms & Conditions	http://support.ts.fujitsu.com/warranty		
Product Related Services - the per	fect extension		
Recommended Service	- 9x5, Onsite Response Time: Next Business Day	- 9x5, Onsite Response Time: Next Business Day	
Spare Parts availability	5 years after end of product life	5 years after end of product life	
Service Weblink	http://www.fujitsu.com/fts/services/support		

# **Recommended Accessories**

Display B24W-7 LED (S)	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.	S26361-K1497-V161
Blue LED Mouse GL9000	Blue LED Mouse GL9000 comes in a slim design with proven Fujitsu engineering quality. The state-of-the-art blue LED sensor enables ultra precise switchable resolution at 1,000, 1,500 and 2,000 dpi. Blue LED Mouse GL9000 makes your life easier because it's tailor-made for right handed users. It just feels great in your hand.	Order Code: S26381-K438-L100
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
Keyboard KB950 Phone	The KB950 Phone is a modern and slim line USB keyboard with integrated Skype for business features. This extremely reliable, high-speed input device is the perfect way to manage incoming and outgoing calls, even when the system is locked. Three additional keys make it easy to accept and end calls and mute your microphone during a call. Easy number dialing is assured with the numpad. The integrated 61 x 12 mm display shows the time and date, the user status and shows incoming call data in the form of the calling number and caller ID.	S26381-F950-L4** (**: Country specific variation)

### More information

### Fujitsu products, solutions & services

In addition to FUJITSU Desktop ESPRIMO D538, 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/

#### Software

www.fujitsu.com/software/

#### More information

Learn more about FUJITSU Desktop ESPRIMO D538, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website. 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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