

Data Sheet

Graphic Cards for Fujitsu Desktop PC ESPRIMO, Workstation CELSIUS and Thin Clients FUTRO

For a wide range of user scenarios, Fujitsu offers selected graphics cards from various vendors. Parameters like quality, availability and reliability are important.

Special designed graphics cards: NVIDIA GeForce GTX 1650 (available with FH bracket only)	2
NVIDIA GeForce RTX 3070 8GB (available with FH bracket only)	3
NVIDIA standard graphic cards links:	1

	NVIDIA GeForce GTX 1650 (available with FH bracket only)								
Description	Full height PCI Express Gen3 - graphics controller card								
Field of application	DX12.0 gaming support with high range performance. Smooth playing up to 2560x1440 resolution possible. Prepared for upcoming 8k displays with up to 7680x4320 resolution.								
	All application with lowest noise during high graphic load.								
Mainboard interface	PCI Express x16 mechanical and electrical								
TV Interfaces	HDMI 2.0b, HDCP 2.2 support								
Connectors on graphic-board	2* DP 1.4 ready, 1* HDMI 2.0b	2* DP 1.4 ready, 1* HDMI 2.0b							
Shipped adapters									
	2*DP, 1*HDMI => three monitor interfaces (can be used simultaneously)								
Possible monitor combinations	DVI-D possible via DP / DVI adapter cable (optional)								
	VGA possible via DP / VGA adapter (optional)								
Electrical power consumption	5W - 75Wmax (depending on graphic load)								
	Local Frame Buffer: 4GB GDDR6, mounted on graphics	board							
	Graphics processor: GPU base = 1410 MHz, GPU boost	Graphics processor: GPU base = 1410 MHz, GPU boost = 1590 MHz Core Frequency							
	Memory Frequency: 6000 MHz, 128bit memory interfa	Memory Frequency: 6000 MHz, 128bit memory interface							
Technical specification	DX12.0 support, OpenGL 4.5								
	DP 1.4, HDMI 2.0b								
	HDCP 2.2 support (High Bandwidth Digital Content Protection) at all digital connectors								
	Occupies 1 PCI Express slot								
Operating systems	Windows 10 Home / 10 Pro	Windows 10 Home / 10 Pro							
Dimensions (W x D in mm)	198mm x 112mm, one slot full height bracket								
Cooling solution	with fan								
Approvals	CE, VCCI (Released for Fujitsu systems only)								
Driver certification	Windows 10 Home, Windows 10 Pro								
Mainboard onboard graphic	DISABLED when using graphics card in main graphic slot								
	Note: system BIOS settings can be changed to run grap	hics card	and onbo	ard grap	hics in pa	irallel			
	All resolutions dependent on display type 4:3 or 16:9 (additional resolutions possible depending on monitor EDID data)								
	Color depth [bit/pixel]: up to 36bit								
	Resolutions					Display type:			
Resolutions / Display types		DP	HDMI	DVI	VGA	4:3	16:9		
		DP	HDIVII	DVI	VGA	or 5:4	or 16:10		
	640/720*480, 720*576, 800*600, 1024*768,1152*864,1280*960, 1280*1024,	x	x	x	x	x			
	1280*720,1280*768, 1280*800, 1360*768, 1600*1024,1680*1050	x	x	x	x		x		
	1600*1200, 1920*1440 1), 2048*1536 1)	x	x	x1)	x	x			
	1920*1080, 1920*1200, 2048*1152	x	x	x	x		x		
	2560*1440 1), 2560*1600 1)	x	x	x1)			x		
	4k Resolution: 3840*2160, 4096*2160	x	x				x		
	5k Resolution: 5120*2880 (via DP)	x	x				x		
	8k Resolution: 7680*4320 (need 2*DP connectors simultaneous)	x					x		

¹⁾ Needs DP to DUAL Link DVI adapter

	NVIDIA GeForce RTX 3070 8GB (a	NVIDIA GeForce RTX 3070 8GB (available with FH bracket only)									
Description	Full height PCI Express Gen4 - graphics controller c	Full height PCI Express Gen4 - graphics controller card									
	DX12.2 gaming support with highest possible perfo	DX12.2 gaming support with highest possible performance. Smooth playing up to 3840x2160 resolution possible.									
Field of application	Support for 8k displays with up to 7680x4320 reso	Support for 8k displays with up to 7680x4320 resolution.									
	All application with lowest noise during high graph	All application with lowest noise during high graphic load.									
Mainboard interface	PCI Express x16 mechanical and electrical										
TV Interfaces	HDMI 2.1, HDCP 2.3 support	HDMI 2.1, HDCP 2.3 support									
Connectors on graphic-board	3* DP 1.4a, 1* HDMI 2.1	3* DP 1.4a, 1* HDMI 2.1									
Shipped adapters											
	3*DP, 1*HDMI => four monitor interfaces (four can be used simultaneously)										
Possible monitor combinations	DVI-D possible via DP / DVI adapter cable (optiona	DVI-D possible via DP / DVI adapter cable (optional)									
	VGA possible via DP / VGA adapter (optional)										
Electrical power consumption	10W - 250Wmax (depending on graphic load)	10W - 250Wmax (depending on graphic load)									
	Local Frame Buffer: 8GB GDDR6, mounted on grap	Local Frame Buffer: 8GB GDDR6, mounted on graphics board									
Technical specification	Graphics processor: GPU base = 1500 MHz, GPU ba	Graphics processor: GPU base = 1500 MHz, GPU boost = 1725 MHz Core Frequency									
	Memory Bandwidth: 448 GB/s, 256bit memory inte	Memory Bandwidth: 448 GB/s, 256bit memory interface									
	DX12.2 support, OpenGL 4.6										
	DP 1.4a, HDMI 2.1										
	HDCP 2.3 support (High Bandwidth Digital Content Protection) at all digital connectors										
	Occupies 1 PCI Express slot electrical (mechanical 2	Occupies 1 PCI Express slot electrical (mechanical 2 slots)									
Operating systems	Windows 10 Home / 10 Pro / Windows 11	Windows 10 Home / 10 Pro / Windows 11									
Dimensions (W x D in mm)	267mm x 112mm, two slot full height bracket	267mm x 112mm, two slot full height bracket									
Cooling solution	With 1 fan	With 1 fan									
Approvals	CE, VCCI (Released for Fujitsu systems only)	CE, VCCI (Released for Fujitsu systems only)									
Driver certification	Windows 10 Home, Windows 10 Pro, Windows 11										
Mainboard onboard graphic	DISABLED when using graphics card in main graphi	ic slot									
	All resolutions depend. on display type 4:3 or 16:9	All resolutions depend. on display type 4:3 or 16:9 (additional resolution possible depend. on monitor EDID data)									
	Color depth [bit/pixel]: up to 36bit	Color depth [bit/pixel]: up to 36bit									
	Resolutions Display type:										
Resolutions / Display types		DP	HDMI	DVI	VGA	4:3	16:9				
				1)	2)	or 5:4	or 16:10				
GEDIERT	640/720*480, 720*576, 800*600, 1024*768,1152*864,1280*960, 1280*1024,	x	x	x	x	х					
	1280*720,1280*768, 1280*800, 1360*768, 1600*1024,1680*1050	x	x	x	x		x				
	1600*1200, 1920*1440, 2048*1536	x	x	x	x	х					
	1920*1080, 1920*1200, 2048*1152	x	x	x	x		x				
	2560*1440, 2560*1600	x	×	x			x				
	4k Resolution: 3840*2160, 4096*2160 3)	x	x				x				
	5k Resolution: 5120*2880	x	x				x				
	8k Resolution: 7680*4320 3)	x	x				x				
1) Needs DP to DUAL Link DV	ladanter										

1) Needs DP to DUAL Link DVI adapter

2) Needs DP to VGA

8k @60fps or 4k @120fps requires High-Speed HDMI 2.1 cable

Link to datasheets of current NVIDIA standard products:

https://www.nvidia.com/en-us/design-visualization/desktop-graphics/

NVIDIA RTX A6000 NVIDIA RTX A5000 NVIDIA RTX A4500 NVIDIA RTX 4000 SFF Ada Generation NVIDIA RTX A4000 NVIDIA RTX A2000 - 12GB NVIDIA T1000 / T1000 - 8GB NVIDIA T400 - 4GB

Link to datasheets of previous NVIDIA standard products:

https://www.nvidia.com/en-us/design-visualization/previous-quadro-desktop-gpus/

NVIDIA Quadro GV100 NVIDIA Quadro RTX 6000 NVIDIA Quadro P6000 NVIDIA Quadro RTX 4000 NVIDIA RTX A2000 - 6GB NVIDIA Quadro P2200 NVIDIA Quadro P1000

More information

Fujitsu platform solutions

In addition to graphic cards, 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 Infrastructureas-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

Client Computing Devices : Fujitsu Global

Software

Fujitsu Product Support Software : Fujitsu EMEIA

More information

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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 Fujitsu Global : Fujitsu Global

Green Policy Innovation

More information

To learn more about Fujitsu, please contact your Fujitsu sales representative or Fujitsu business partner or visit our Internet site:

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