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Z BY HP GRAPHICS QUICK REFERENCE GUIDE

PROFESSIONAL GRAPHICS SOLUTIONS FOR Z BY HP WORKSTATIONS

HP is proud to exclusively offer professional graphics choices on all of our HP Workstations—from the HP ZBook family to our ultimate workstation, the HP Z8.

HP's professional graphics line-up is perfect for users who are running business critical applications who require stability, reliability, great performance, additional support, and application-specific features and optimization for things like complex design modeling, dataset manipulation, visual effects and visualization.



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HP DESKTOP WORKSTATIONS GRAPHICS SUPPORT MATRIX

Platform		HP Z2 Mini G4	HP Z2 SFF G4	HP Z2 Tower G4	HP Z4 G4	HP Z6 G4	HP Z8 G4
Graphics	Category						
Intel® UHD Graphics 630	Office 2D	•	•	•	-	-	-
Intel® UHD Graphics P630	Entry 3D	•	•	•	-	-	-
AMD Radeon™ Pro WX 3100	Low-end 3D	-	•	••*	••	••	••
AMD Radeon™ Pro WX 3200 MXM	Low-end 3D	•***	-	-	-	-	-
AMD Radeon™ Pro WX 3200	Low-end 3D	-	•	•	••	••	••••
AMD Radeon™ Pro W5500	Mid-range 3D	•	•	•	••	••	•••*
AMD Radeon™ Pro W5700	High-end 3D	•	•	•	•	•	•
AMD Radeon™ Pro WX 7100	High-end 3D	-	-	•	••	••	•••*
AMD Radeon™ Pro WX 9100	Ultra 3D	-	-	-	•	•	•
NVIDIA® Quadro® P400	Entry 3D	-	•	••*	••	••	••
NVIDIA® Quadro® P600	Low-end 3D	•**	-	-	-	-	-
NVIDIA® Quadro® P620	Entry 3D	-	•	••*	••	••	••
NVIDIA® Quadro® P1000	Mid-range 3D	•**	•	••*	••	•••	••••
NVIDIA® Quadro® P2200	Mid-range 3D	-	-	•	••	••	••••
NVIDIA® Quadro® P4000	High-end 3D	-	-	•	••	••	•••
NVIDIA® Quadro® P5000	Ultra 3D	-	-	•	••*	••	•••
NVIDIA® Quadro® P6000	Ultra 3D	-	-	-	••*	•	•••
NVIDIA® Quadro® GV100	Ultra 3D	-	-	-	••*	-	•••
NVIDIA® Quadro® RTX 4000	High End 3D	-	-	•	••*	••*	••••*
NVIDIA® Quadro® RTX 5000	Ultra 3D	-	-	•*	••*	•	••*
NVIDIA® Quadro® RTX 6000	Ultra 3D	-	-	•*	••*	•	••*
NVIDIA® Quadro® RTX 8000	Ultra 3D	-	-	-	••*	•	••*

Key Legend:

- single
- dual
- triple
- quad

NOTE

*Please refer to platform specifications and ordering guides for applicable configuration restrictions

**MXM module (P600/4G, P1000/4G)

***MXM module (WX 4150/4G, WX 3200/4G)



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HP DESKTOP WORKSTATIONS INTEGRATED GRAPHICS SPEC SUMMARY

Graphics Module	Intel® UHD Graphics 630	Intel® UHD Graphics P630
Graphics Category	Office 2D	Entry 3D
Memory (shared with system)	up to 64 GB	up to 1.7 GB
Execution Units	24	24
DirectX Support	12	12
OpenGL Support	4.5	4.5
Max Resolution (DP)	4096 x 2304 @ 60 Hz	4096 x 2304 @ 60 Hz
Max Displays	3	3



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HP DESKTOP WORKSTATIONS DISCRETE GRAPHICS SPEC SUMMARY

Graphics Module	NVIDIA® Quadro® P400	NVIDIA® Quadro® P600 MXM	NVIDIA® Quadro® P620	AMD Radeon™ Pro WX 3100
Graphics Category	Entry 3D	Entry 3D	Entry 3D	Entry 3D
Graphics Memory	2 GB GDDR5	4 GB GDDR5	2 GB GDDR5	4 GB GDDR5
Memory Bandwidth	Up to 32 GB/s	-	Up to 64 GB/s	Up to 96 GB/s
Cores	256	384	512	512
Power	30 W	25 W	40 W	35 W
Form Factor ⁶	single slot, Half Height	MXM	single slot, Half Height	single slot, Half Height
DirectX Support	12	12	12	12
OpenGL Support	4.5	4.5	4.5	4.5
Max Resolution (DP) ¹	5120 x 2880 @ 60 Hz	5120 x 2880 @ 60 Hz	5120 x 2880 @ 60Hz	5120 x 2880 @ 60Hz ²
Max Displays	3	4	4	4 or 6 with DP MST
Video Outputs	3x mini-DP	4x mini-DP	4x mini-DP	1x DP and 2x mDP 1.4
Included Video Cables:				
CTO	None	-	None	None
AMO	2x mini-DP to DP	-	2x mini-DP to DP	1x mini-DP to DP
ISV Certified	Yes	Yes	Yes	Yes
Other	GPU Boost 3.0, CUDA®, Mosaic™	CUDA®	GPU Boost 3.0, CUDA®, Mosaic™	AMD® Sync, OpenCL™ 2.0, Eyefinity, DirectGMA, FreeSync, HDR Ready



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HP DESKTOP WORKSTATIONS DISCRETE GRAPHICS SPEC SUMMARY (CONTINUED)

Graphics Module	AMD Radeon™ Pro WX 3200	AMD Radeon™ Pro WX 3200 MXM	NVIDIA® Quadro® P1000	NVIDIA® Quadro® P1000 MXM
Graphics Category	Low-end 3D	Low-end 3D	Mid-range 3D	Mid-range 3D
Graphics Memory	4 GB GDDR5	4 GB GDDR5	4 GB GDDR5	4 GB GDDR5
Memory Bandwidth	Up to 96 GB/s	-	Up to 80 GB/s	-
Cores	640	640	640	640
Power	56 W	41 W	47 W	40 W
Form Factor ⁶	single slot, Half Height	MXM	single slot, Full Height	MXM
DirectX Support	12	12	12	12
OpenGL Support	4.5	4.6	4.5	4.5
Max Resolution (DP) ¹	5120 x 2880 @ 60Hz ²	5120 x 2880 @ 60Hz ²	5120 x 2880 @ 60 Hz	5120 x 2880 @ 60 Hz
Max Displays	4 or 5 with DP MST	5	4	4
Video Outputs	4x mDP 1.4	-	4x mini-DP	-
Included Video Cables:				
CTO	None	-	None	-
AMO	2x mini-DP to DP	-	2x mini-DP to DP	-
ISV Certified	Yes	Yes	Yes	Yes
Other	AMD® Sync, OpenCL 2.0, Eyefinity, DirectGMA, FreeSync, HDR Ready	OpenCL™ 2.0	GPU Boost 3.0, CUDA®, Mosaic™	CUDA®



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Graphics Module	NVIDIA® Quadro® P2200	AMD Radeon™ Pro W5500	AMD Radeon™ Pro W5700	AMD Radeon™ Pro WX 7100
Graphics Category	Mid-range 3D	Mid-range 3D	High-end 3D	High-end 3D
Graphics Memory	5 GB GDDR5X	8 GB GDDR6	8 GB GDDR6	8 GB GDDR5
Memory Bandwidth	Up to 200 GB/s	Up to 224 GB/s	Up to 448 GB/s	Up to 224 GB/s
Cores	1280	1408	2304	2304
Power	75 W	130 W	205 W	130 W
Form Factor ⁶	single slot, Full Height	single slot, Full Height	dual slot, Full Height	single slot, Full Height
DirectX Support	12	12	12	12
OpenGL Support	4.5	4.6	4.6	4.5
Max Resolution (DP) ¹	5120 x 2880 @ 60Hz	7690 x 4320 @ 60 Hz ^{7,9}	7690 x 4320 @ 60 Hz ^{7,8}	5120 x 2880 @ 60 Hz ²
Max Displays	4	4	6	4 or 6 with DP MST
Video Outputs	4x DP 1.4	4x DP 1.4a	5x mDP 1.4a and 1x USB-C AltMode port	4x DP 1.4
Included Video Cables:				
CTO	None	None	None	None
AMO	None	None	None	None
ISV Certified	Yes	Yes	Yes	Yes
Other	GPU Boost 3.0, CUDA®, Mosaic™	OpenCL 2.0, FreeSync, HDR Ready, Radeon™ Pro Software, AMD Eyefinity Technology (Professionals), Radeon™ ProRender, Unified Video Decoder (UVD), Video Code Engine (VCE), VR Ready	OpenCL 2.0, FreeSync, HDR Ready, Radeon™ Pro Software, AMD Eyefinity Technology (Professionals), Radeon™ ProRender, Unified Video Decoder (UVD), Video Code Engine (VCE), VR Ready	AMD® Sync, OpenCL™ 2.0, Eyefinity, DirectGMA, FreeSync, HDR Ready, VR Ready



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Graphics Module	NVIDIA® Quadro® P4000	NVIDIA® Quadro® P5000	NVIDIA® Quadro® RTX 4000	NVIDIA® Quadro® RTX 5000	NVIDIA® Quadro® P6000
Graphics Category	High-end 3D	High-end 3D	High-end 3D	Ultra 3D	Ultra 3D
Graphics Memory	8 GB GDDR5	16 GB GDDR5X	8 GB GDDR6	16 GB GDDR6	24 GB GDDR5X
Memory Bandwidth	Up to 243 GB/s	Up to 288 GB/s	Up to 416 GB/s	Up to 448 GB/s	Up to 432 GB/s
Cores	1792	2560	2304	3072	3840
Power	120 W	180 W	160 W	265 W	250 W
Form Factor ⁶	single slot, Full Height	dual slot, Full Height	single slot, Full Height	dual slot, Full Height	dual slot, Full Height
DirectX Support	12	12	12	12	12
OpenGL Support	4.5	4.5	4.5	4.5	4.5
Max Resolution (DP) ¹	5120 x 2880 @ 60Hz	5120 x 2880 @ 60 Hz	7680 x 4320 @ 60Hz	7680 x 4320 @ 60 Hz	5120 x 2880 @ 60 Hz
Max Displays	4	4	4	4	4
Video Outputs	4x DP 1.4	4x DP 1.4 and DL-DVI	3x DP 1.4a and VirtualLink ⁴	4x DP 1.4a and VirtualLink ⁴	4x DP 1.4 and DL-DVI
Included Video Cables:					
CTO	None	None	None	None	None
AMO	None	None	None	None	None
ISV Certified	Yes	Yes	Yes	Yes	Yes
Other	Quadro® Sync II, GPUDirect, GPU Boost 3.0, SLI®, CUDA®, Mosaic™, VR Ready	Quadro® Sync II, GPUDirect, GPU Boost 3.0, SLI®, CUDA®, Mosaic™, VR Ready	Quadro® Sync II, CUDA®, Mosaic™, VR Ready	Quadro® Sync II, GPUDirect, GPU Boost 3.0, NVLink/SLI®, CUDA®, Mosaic™, VR Ready	Quadro® Sync II, GPUDirect, GPU Boost 3.0, SLI®, CUDA®, Mosaic™, VR Ready



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HP DESKTOP WORKSTATIONS DISCRETE GRAPHICS SPEC SUMMARY (CONTINUED)

Graphics Module	NVIDIA® Quadro® RTX 6000	NVIDIA® Quadro® GV100	AMD Radeon™ Pro WX 9100	NVIDIA® Quadro® RTX 8000
Graphics Category	Ultra 3D	Ultra 3D	Ultra 3D	Ultra 3D
Graphics Memory	24 GB GDDR6	32 GB HBM2	16 GB HBM2	48 GB GDDR6
Memory Bandwidth	Up to 672 GB/s	Up to 870 GB/s	Up to 483 GB/s	Up to 2672 GB/s
Cores	4608	5120	4096	4608
Power	295 W	250 W	250 W	295 W
Form Factor ⁶	dual slot, Full Height	dual slot, Full Height	dual slot, Full Height	dual slot, Full Height
DirectX Support	12	12	12	12
OpenGL Support	4.5	4.5	4.5	4.5
Max Resolution (DP) ¹	7680 x 4320 @ 60 Hz	5120 x 2880 @ 60Hz	7680 x 4320 @ 60Hz ⁵	7680 x 4320 @ 60 Hz
Max Displays	4	4	6	4
Video Outputs	4x DP 1.4a and VirtualLink ⁴	4x DP 1.4	6x mDP 1.4	4x DP 1.4a and VirtualLink ⁴
Included Video Cables:				
CTO	None	None	None	None
AMO	None	None	2x mini-DP to DP	None
ISV Certified	Yes	Yes ³	Yes	Yes
Other	Quadro® Sync II, GPUDirect, GPU Boost 3.0, NVLink/SLI® ² , CUDA®, Mosaic™, VR Ready	Quadro® Sync II, GPUDirect, GPU Boost 3.0, CUDA®, Mosaic™, VR Ready, Multi-GPU Scalability NVLink (2-way)	AMD® Sync, OpenCL™ 2.0, Eyefinity, DirectGMA, FreeSync, HDR Ready, VR Ready	Quadro® Sync II, GPUDirect, GPU Boost 3.0, NVLink/SLI®, CUDA®, Mosaic™, VR Ready



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HP MOBILE WORKSTATIONS GRAPHICS SUPPORT MATRIX

Graphics	Category	HP ZBook	HP ZBook	HP ZBook	HP ZBook	HP ZBook
		14u G5/ 15u G5	14u/15u G6	Firefly 14/15 G7	Studio x360 G5	Studio G5
Intel® HD Graphics 620	Office 2D	•	-	-	-	-
Intel® UHD Graphics 620	Office 2D	•	•	-	-	-
Intel® UHD Graphics 630	Office 2D	-	-	-	•	•
Intel® UHD Graphics P630	Entry 3D	-	-	-	•	•
AMD Radeon™ Pro WX 3100	Entry 3D	•	-	-	-	-
AMD Radeon™ Pro WX 3200	Entry 3D	-	•	-	-	-
NVIDIA® Quadro® P520	Entry 3D	-	-	•	-	-
NVIDIA® Quadro® P1000	Mid-range 3D	-	-	-	•	•
NVIDIA® Quadro® P2000	Mid-range 3D	-	-	-	•	•

Key Legend:

- single



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HP MOBILE WORKSTATIONS GRAPHICS SUPPORT MATRIX

		HP ZBook 15v G5	HP ZBook 15 G6	HP ZBook 17 G6
Graphics	Category			
Intel® UHD Graphics 630	Office 2D	•	•	•
Intel® UHD Graphics P630	Entry 3D	•	•	•
NVIDIA® Quadro® P600	Entry 3D	•	-	-
NVIDIA® Quadro® T1000	Mid-range 3D	-	•	•
NVIDIA® Quadro® T2000	Mid-range 3D	-	•	-
NVIDIA® Quadro® RTX 3000	High-end 3D	-	•	•
NVIDIA® Quadro® RTX 4000	High-end 3D	-	-	•
NVIDIA® Quadro® RTX 5000	High-end 3D	-	-	•

Key Legend:

- single



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HP MOBILE WORKSTATIONS INTEGRATED GRAPHICS SPEC SUMMARY

Graphics Module	Intel® HD Graphics 620	Intel® UHD Graphics 620	Intel® UHD Graphics 630	Intel® UHD Graphics P630
Graphics Category	Office 2D	Office 2D	Office 2D	Entry 3D
Memory (shared with system)	Up to 32 GB	Up to 32 GB	Up to 64 GB	Up to 1.7 GB
Execution Units	24	24	24	24
DirectX Support	12	12	12	12
OpenGL Support	4.4	4.4	4.5	4.5
Max Resolution (DP)	4096 x 2304 @ 60 Hz	4096 x 2304 @ 60 Hz	4096 x 2304 @ 60 Hz	4096 x 2304 @ 60 Hz
Max Displays	3	3	3	3
ISV Certified	No	No	No	No
Other	OpenCL™ 2.0	OpenCL™ 2.0	OpenCL™ 2.0	OpenCL™ 2.0



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HP MOBILE WORKSTATIONS DISCRETE GRAPHICS SPEC SUMMARY

Graphics Module	NVIDIA® Quadro® P520	NVIDIA® Quadro® P600	AMD Radeon™ Pro WX 3100	AMD Radeon™ Pro WX 3200	NVIDIA® Quadro® P1000
Graphics Category	Entry 3D	Entry 3D	Entry 3D	Entry 3D	Mid-range 3D
Memory	4 GB GDDR5	4 GB GDDR5	2 GB GDDR5	4 GB GDDR5	4 GB GDDR5
Cores	384	384	512	640	640
Power	18 W	25 W	18 W	18 W	40 W
DirectX Support	12	12	12	12	12
OpenGL Support	4.5	4.5	4.5	4.5	4.5
Max Resolution (DP) ¹	Headless Design	5120 x 2880 @ 60 Hz	5120 x 2880 @ 60 Hz	5120 x 2880 @ 60 Hz	5120 x 2880 @ 60 Hz
Display Pipelines ¹	Headless Design	4	3	3	4
ISV Certified	Yes	Yes	Yes	Yes	Yes
Other	CUDA®	CUDA®	OpenCL™ 2.0 Vulkan 1.0	OpenCL™ 2.0 Vulkan 1.0	CUDA®

Graphics Module	NVIDIA® Quadro® P2000	NVIDIA® Quadro® T1000	NVIDIA® Quadro® T2000	NVIDIA® Quadro® RTX 3000	NVIDIA® Quadro® RTX 4000
Graphics Category	Mid-range 3D	Mid-range 3D	Mid-range 3D	High-end 3D	High-end 3D
Memory	4 GB GDDR5	4 GB GDDR5	4 GB GDDR5	6 GB GDDR6	8 GB GDDR6
Cores	768	768	1024	2304	2560
Power	50 W	50 W	60 W	80 W ²	80 W
DirectX Support	12	12	12	12	12
OpenGL Support	4.5	4.5	4.5	4.5	4.5
Max Resolution (DP) ¹	5120 x 2880 @ 60 Hz	5120 x 2880 @ 60 Hz	5120 x 2880 @ 60 Hz	5120 x 2880 @ 60 Hz	5120 x 2880 @ 60 Hz
Display Pipelines ¹	4	4	4	4	4
ISV Certified	Yes	Yes	Yes	Yes	Yes
Other	CUDA®	CUDA®	CUDA®	CUDA®	CUDA®



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HP MOBILE WORKSTATIONS DISCRETE GRAPHICS SPEC SUMMARY (CONTINUED)

Graphics Module	NVIDIA® Quadro® RTX 5000
Graphics Category	High-end 3D
Memory	16 GB GDDR6
Cores	3072
Power	80 W
DirectX Support	12
OpenGL Support	4.5
Max Resolution (DP) ¹	5120 x 2880 @ 60 Hz
Display Pipelines ¹	4
ISV Certified	Yes
Other	CUDA®



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HP VR BACKPACK AND Z1 GRAPHICS SUPPORT MATRIX

		HP VR Backpack	HP Z1 G5
Graphics	Category		
AMD Radeon™ 520	Office 2D	-	•
NVIDIA® GeForce® GT730	Office 2D	-	• • *
AMD Radeon™ R7 430 (DP+VGA)	Office 2D	-	• • *
AMD Radeon™ R7 430 (2DP)	Office 2D	-	• • *
NVIDIA® Quadro® P400	Entry 3D	-	•
NVIDIA® Quadro® P620	Entry 3D	-	•
NVIDIA® Quadro® P1000	Entry 3D	-	•
AMD Radeon™ RX 550X	Mid-range 3D	-	•
AMD Radeon™ RX580	High-end 3D	-	•
NVIDIA® GeForce® RTX 2060	High-end 3D	-	•
NVIDIA® GeForce® RTX 2070	Hign-end 3D	-	•
NVIDIA® GeForce® RTX 2070 Super	Hign-end 3D	-	•
NVIDIA® GeForce® RTX 2080	Ultra 3D	-	•
NVIDIA® GeForce® RTX 2080 (mobile)	Ultra 3D	•	-

Key Legend:

- single
- • dual

NOTE

*2nd PCIe slot is not x16, may only be x4 electrically



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HP VR BACKPACK AND Z1 GRAPHICS SPEC SUMMARY

Graphics Module	AMD Radeon™ 520	NVIDIA® GeForce® GT730	AMD Radeon™ R7 430 (DP+VGA)	AMD Radeon™ R7 430 (2DP)	AMD Radeon™ RX 550X	AMD Radeon™ RX 580
Graphics Category	Office 2D	Office 2D	Office 2D	Office 2D	Midrange 3D	High-end 3D
Graphics Memory	1GB GDDR5	2GB GDDR5	2GB GDDR5	2GB GDDR5	4GB GDDR5	8GB GDDR5
Memory Bandwidth	Up to 8 GB/s	Up to 20 GB/s	Up to 17 GB/s	Up to 17 GB/s	Up to 192 GB/s	Up to 256 GB/s
Graphics Memory Bus	32-bit	64-bit	64-bit	64-bit	128-bit	256-bit
Cores	-	-	-	-	-	-
Power	50W	25W	<50W	<50W	50W	150W
Auxiliary Power Connector(s)						6pin
Form Factor ²	Single slot, Half Height	Single slot, Half Height	Single slot, Half Height	Single slot, Half Height	Single slot, Full Height	Dual slot, Full Height
Max Resolution (DP) ¹	4096x2160 @ 60Hz	4096x2160 @ 60Hz	4096x2160 @ 60Hz	4096x2160 @ 60Hz	5120x2880 @ 60Hz	5120x3200 @ 60Hz
Max Displays	2	2	2	2	2	4
Video Outputs	DP+VGA	DP+DVI	DP+VGA	2xDP	HDMI+2xDP	3xDP+HDMI
ISV Certified	No	No	No	No	No	No



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HP VR BACKPACK AND Z1 GRAPHICS SPEC SUMMARY (CONTINUED)

Graphics Module	NVIDIA® GeForce® RTX 2060	NVIDIA® GeForce® RTX 2070	NVIDIA® GeForce® RTX 2070 Super	NVIDIA® GeForce® RTX 2080	NVIDIA® GeForce® RTX 2080 (mobile)
Graphics Category	High-end 3D	High-end 3D	Ultra 3D	Ultra 3D	Ultra 3D
Graphics Memory	6 GB GDDR6	8 GB GDDR6	8GB GDDR6	8GB GDDR6	8GB GDDR6
Memory Bandwidth	Up to 336 GB/s	Up to 448 MB/s	Up to 448 MB/s	Up to 448 MB/s	Up to 448 MB/s
Graphics Memory Bus	192-bit	256-bit	256-bit	256-bit	256-bit
Cores	-	-	-	-	-
Power	170W	210W	250W	250W	150W (Max-P)
Auxiliary Power Connector(s)	8pin	8pin+6pin	6pin+8pin	6pin+8pin	-
Form Factor ²	Dual slot, Full Height	Dual slot, Full Height	Dual slot, Full Height	Dual slot, Full Height	Motherboard-down
Max Resolution (DP) ¹	7680x4320 @ 60Hz	7680x4320 @ 60Hz	7680x4320 @ 60Hz	7680x4320 @ 60Hz	7680x4320 @ 60Hz
Max Displays	2	4	4	4	4
Video Outputs	DP+HDMI+DVI	3xDP+HDMI	3xDP+HDMI	3xDP+HDMI	Defined by system & dock
ISV Certified	No	No	No	No	No



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GRAPHICS ACCESSORIES

DisplayPort™ to DVI-D	Single link DVI-D support (max 1920x1200 @ 60 Hz) Part number: FH973AA
DisplayPort™ to dual link DVI	Dual link DVI-D supports 2560x1600 @60 Hz Part number: NR078AA
DisplayPort™ to HDMI True 4K Adapter	Supports audio over DP, supports UHD up to 30 Hz and True 4K up to 24 Hz (HDMI 1.4) Part number: 2JA63AA
DisplayPort™ to VGA	VGA support Part number: AS615AA
DVI-I to VGA	VGA support Part number: VE053AA
6-pin to 8-pin Power Adapter	HP Z Workstation PSU adaptor for graphics Part number: N1G35AA
NVIDIA® SLI® 2-Slot Connector	For NVIDIA® Quadro® P4000, P5000, and P6000 on HP Z4 G4 or HP Z8 G4 Part number: 2YY84AA
NVIDIA® SLI® 3-Slot Connector	For NVIDIA® Quadro® P4000, P5000, and P6000 on HP Z6 G4 Part number: 2YY85AA
NVIDIA® 3D Stereo Bracket	For NVIDIA® Quadro® M4000, M5000, M6000, P5000, P6000 applications Part number: K0A25AA
NVIDIA® Quadro® Sync II	For NVIDIA® Quadro® P4000, P5000, P6000, GP100, GV100, RTX 4000, RTX 5000, RTX 6000, RTX 8000 Part number: 1WT20AA
HP (Bulk 12) miniDP-to-DP Adapter Cables	To connect additional displays to graphics cards with miniDP ports Part number: 2KW87A6
HP Single miniDP-to-DP Adapter Cable	To connect one additional display to graphics card's miniDP port Part number: 2MY05AA
HP NVIDIA® GV100 NVLink Bridge Kit (Pair)	To connect two GV100 graphics cards for GPU-compute scaling Part number: 3NZ66AA
Quadro RTX NVLink 2-slot Bridge	To connect two RTX 5000 graphics cards for GPU-compute scaling Part number: 6FY12AA
Quadro RTX NVLink 3-slot Bridge	To connect two RTX 5000 graphics cards for GPU-compute scaling Part Number:6FY14AA
Quadro RTX NVLink High-Bandwidth 2-slot Bridge	To connect two RTX 6000 or RTX 8000 graphics cards for GPU-compute scaling Part number: 6FY11AA
Quadro RTX NVLink High-Bandwidth 3-slot Bridge	To connect two RTX 6000 or RTX 8000 graphics cards for GPU-compute scaling Part number: 6FY13AA



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ADDITIONAL RESOURCES

Resources, contacts, or additional links

AMD FirePro™ Professional Graphics amd.com/en-us/solutions/workstations

NVIDIA® Quadro® Graphics nvidia.com/object/hp_workstations.html

High Performance Computing www8.hp.com/us/en/campaigns/workstations/gpu-computing.html

Learn more at hp.com/go/leadershipgraphics

SOURCES AND LEGAL DISCLAIMERS

HP Z Desktop Workstation notes

- ¹ Not all video outputs of the graphics card may support the stated Max Resolution. See the card QuickSpecs for details and any restrictions.
- ² 2x dual DP 1.3 cabled 5k displays max., or 1x single cable DP 1.4.
- ³ Tested by select ISVs.
- ⁴ As of December 2019, VirtualLink's USB-C (data) can be disabled via BIOS setting.
- ⁵ 6x DP 1.3 4K@60 Hz or 3x 5K@60 Hz or 1x 8K@60 Hz.
- ⁶ "Half Height" is also known as "Low Profile", "Single Slot" is also known as "Single Width", and "Dual Slot" is also known as "Dual Width".
- ⁷ Some video display modes such as 7680x4320@60Hz require the use of DSC (Display Stream Compression).
- ⁸ Up to 6x 4K@60Hz, up to 3x 5K or 8K@60Hz, up to 3x 4K@120Hz.
- ⁹ Up to 4x 4K@60Hz, up to 2x 5K or 8K@60Hz, up to 2x 4K@120Hz.

HP ZBook Mobile Workstation notes

- ¹ See mobile workstation system specifications for display output types and max displays and resolutions supported.
- ² HP ZBook 15 G6 uses 65 W MaxQ RTX 3000, and all GPUs are on the system board.

HP VR Backpack and Z1 notes

- ¹ Not all video outputs of the graphics card may support the stated Max Resolution. See the card QuickSpecs for details and any restrictions.
- ² "Half Height" is also known as "Low Profile", "Single Slot" is also known as "Single Width", and "Dual Slot" is also known as "Dual Width".

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