

Video Output Information

1. In the External Display Output column, the supported resolutions and the refresh rates for each display port are listed.
2. The port listed in front represents the port on the laptop, and the other one represents the port connected on the external monitor.

3. The Display Ports column shows the type and number of output connectors.

*The miniDP and Type-C w/DP ports on the laptops listed in this document support DP v1.4 unless stated otherwise.

4. See the list of used acronyms in the right table.

5. The MUX switch is an option that allows users to run the system in MSHybrid mode or Discrete Graphics mode, and can be configured in the General Settings in MSI Centers (MSI Center/ MSI Center Pro) on laptops that support it.

6. To know which graphics card the display port is wired to, check where the display port is shown in the table, or check the connected graphics in the “Set PhysX Configuration” page in NVIDIA Control Panel.

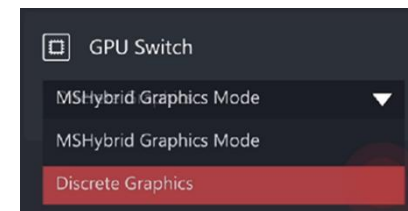
External Display Output	
Max Resolution	Max Refresh Rate
TBT-HDMI ¹ : 4096x2160 @60Hz	TBT-HDMI ¹ : 1920x1080 @240Hz
TBT-DP: 5120x2160 @60Hz	TBT-DP: 1920x1080 @240Hz
TBT-Type C(TB/DP): 5120x2160 @60Hz	TBT-Type C(TB/DP): 1920x1080 @240Hz

Max Resolution
TBT-HDMI ¹ : 4096x2160 @60Hz
TBT-DP: 5120x2160 @60Hz
TBT-Type C(TB/DP): 5120x2160 @60Hz

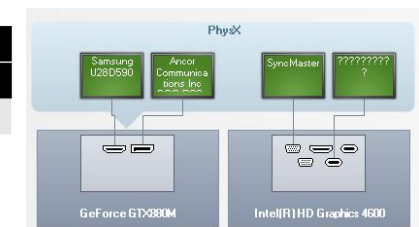


Display Ports	
iGPU	dGPU
TBT 4 ³ x1	-
Type-C w/DP x1	-
-	HDMIx1

Acronym	Description
DP/mDP	Display Port/ mini Display Port
HDMI	High-Definition Multimedia Interface
TBT	Thunderbolt
iGPU/dGPU	Integrated GPU/ Dedicated GPU



Display Ports	
iGPU	dGPU
TBT 4 ³ x2	-



MSI Laptops with Core Ultra 2 Intel Processor

Gaming

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Titan Series- 1/2

Notebook	GPU	MUX Switch	Display Ports		External Display Output		Matrix Display (incl. NB display)
			iGPU	dGPU* ²	Max Resolution	Max Refresh Rate	
Titan 18HX A2XWJG	RTX 5090	V	-	TBT 5* ¹ x2	TBT-HDMI: 7680x4320 @60Hz TBT-DP: 7680x4320 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 3840x2160 @144Hz	TBT-HDMI: 2560x1440 @360Hz TBT-DP: 1920x1080 @380Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP):2560x1440 @360Hz	4* ³
			-	HDMI x1	HDMI : 7680x4320 @60Hz	HDMI : 2560x1440 @360Hz	
Titan 18HX A2XWIG	RTX 5080	V	-	TBT 5* ¹ x2	TBT-HDMI: 7680x4320 @60Hz TBT-DP: 7680x4320 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 3840x2160 @144Hz	TBT-HDMI: 2560x1440 @360Hz TBT-DP: 1920x1080 @380Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP):2560x1440 @360Hz	4* ³
			-	HDMI x1	HDMI : 7680x4320 @60Hz	HDMI : 2560x1440 @360Hz	
Titan 18HX A2XWHG	RTX 5070TI	V	-	TBT 5* ¹ x2	TBT-HDMI: 7680x4320 @60Hz TBT-DP: 7680x4320 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 3840x2160 @144Hz	TBT-HDMI: 2560x1440 @360Hz TBT-DP: 1920x1080 @380Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP):2560x1440 @360Hz	4* ³
			-	HDMI x1	HDMI : 7680x4320 @60Hz	HDMI : 2560x1440 @360Hz	

- Note:
- *1: Thunderbolt ports wired to the iGPU support external displays in MSHybrid Graphics and Integrated Graphics mode only. (<https://www.msi.com/faq/faq-4175>)
 - *2: VR devices will require display ports wired to the dGPU to function correctly.
Display output ports wired to the dGPU support external displays in MSHybrid Graphics and Discrete Graphics mode only.
 - *3: Maximum matrix display numbers are tested under MSHybrid mode.

Titan Series- 2/2

Notebook	GPU	MUX Switch	Display Ports		External Display Output		Matrix Display (incl. NB display)
			iGPU	dGPU*2	Max Resolution	Max Refresh Rate	
Titan 18 HX A2WH	RTX 5070Ti	V	-	TBT 5*1 x2	TBT-HDMI: 7680x4320 @60Hz TBT-DP: 7680x4320 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 5120*1440 240Hz	TBT-HDMI: 1920x1080 @600Hz TBT-DP: 1920x1080 @600Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 1920x1080 @600Hz	4*3
			-	HDMI x1	HDMI : 7680x4320 @60Hz	HDMI : 1920x1080 @600Hz	
Titan 18 HX A2WI	RTX 5080	V	-	TBT 5*1 x2	TBT-HDMI: 7680x4320 @60Hz TBT-DP: 7680x4320 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 5120*1440 240Hz	TBT-HDMI: 1920x1080 @600Hz TBT-DP: 1920x1080 @600Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 1920x1080 @600Hz	4*3
			-	HDMI x1	HDMI : 7680x4320 @60Hz	HDMI : 1920x1080 @600Hz	
Titan 18 HX A2WJ	RTX 5090	V	-	TBT 5*1 x2	TBT-HDMI: 7680x4320 @60Hz TBT-DP: 7680x4320 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 5120*1440 240Hz	TBT-HDMI: 1920x1080 @600Hz TBT-DP: 1920x1080 @600Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 1920x1080 @600Hz	4*3
			-	HDMI x1	HDMI : 7680x4320 @60Hz	HDMI : 1920x1080 @600Hz	

Note:

*1: Thunderbolt ports wired to the iGPU support external displays in MSHybrid Graphics and Integrated Graphics mode only. (<https://www.msi.com/faq/faq-4175>)

*2: VR devices will require display ports wired to the dGPU to function correctly.

Display output ports wired to the dGPU support external displays in MSHybrid Graphics and Discrete Graphics mode only.

*3: Maximum matrix display numbers are tested under MSHybrid mode.

Raider Series- 1/6

Notebook	GPU	MUX Switch	Display Ports		External Display Output		Matrix Display (incl. NB display)
			iGPU	dGPU*2	Max Resolution	Max Refresh Rate	
Raider 18 HX AI A2XWJG	RTX 5090	V	-	TBT 5*1 x2	TBT-HDMI: 7680x4320 @60Hz TBT-DP: 7680x4320 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 3840x2160 @144Hz	TBT-HDMI: 2560x1440 @360Hz TBT-DP: 1920x1080 @380Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP):2560x1440 @360Hz	4*3
			-	HDMI x1	HDMI : 7680x4320 @60Hz	HDMI : 2560x1440 @360Hz	
Raider 18 HX AI A2XWIG	RTX 5080	V	-	TBT 5*1 x2	TBT-HDMI: 7680x4320 @60Hz TBT-DP: 7680x4320 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 3840x2160 @144Hz	TBT-HDMI: 2560x1440 @360Hz TBT-DP: 1920x1080 @380Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP):2560x1440 @360Hz	4*3
			-	HDMI x1	HDMI : 7680x4320 @60Hz	HDMI : 2560x1440 @360Hz	
Raider 18 HX AI A2XWHG	RTX 5070TI	V	-	TBT 5*1 x2	TBT-HDMI: 7680x4320 @60Hz TBT-DP: 7680x4320 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 3840x2160 @144Hz	TBT-HDMI: 2560x1440 @360Hz TBT-DP: 1920x1080 @380Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP):2560x1440 @360Hz	4*3
			-	HDMI x1	HDMI : 7680x4320 @60Hz	HDMI : 2560x1440 @360Hz	

Note:

*1: Thunderbolt ports wired to the iGPU support external displays in MSHybrid Graphics and Integrated Graphics mode only. (<https://www.msi.com/fag/fag-4175>)

*2: VR devices will require display ports wired to the dGPU to function correctly.

Display output ports wired to the dGPU support external displays in MSHybrid Graphics and Discrete Graphics mode only.

*3: Maximum matrix display numbers are tested under MSHybrid mode.

Raider Series- 2/6

Notebook	GPU	MUX Switch	Display Ports		External Display Output		Matrix Display (incl. NB display)
			iGPU	dGPU*2	Max Resolution	Max Refresh Rate	
Raider 16 Max HX B2WI	RTX 5080	V	TBT 4*1 x2	-	TBT-HDMI: 7680x4320 @60Hz TBT-DP: 7680x4320 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 5120*1440 @240Hz	TBT-HDMI: 1920x1080 @600Hz TBT-DP: 1920x1080 @600Hz 5120x2160 @60Hz TBT-Type C(DP):1920x1080 @600Hz	4*3
			-	HDMI x1	HDMI: 7680x4320 @60Hz	HDMI: 1920x1080 @600Hz	
Raider 16 Max HX B2WJ	RTX 5090	V	TBT 4*1 x2	-	TBT-HDMI: 7680x4320 @60Hz TBT-DP: 7680x4320 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 5120*1440 @240Hz	TBT-HDMI: 1920x1080 @600Hz TBT-DP: 1920x1080 @600Hz 5120x2160 @60Hz TBT-Type C(DP):1920x1080 @600Hz	4*3
			-	HDMI x1	HDMI: 7680x4320 @60Hz	HDMI: 1920x1080 @600Hz	

Note:

*1: Thunderbolt ports wired to the iGPU support external displays in MSHybrid Graphics and Integrated Graphics mode only. (<https://www.msi.com/faq/faq-4175>)

*2: VR devices will require display ports wired to the dGPU to function correctly.

Display output ports wired to the dGPU support external displays in MSHybrid Graphics and Discrete Graphics mode only.

*3: Maximum matrix display numbers are tested under MSHybrid mode.

Raider Series- 3/6

Notebook	GPU	MUX Switch	Display Ports		External Display Output		Matrix Display (incl. NB display)
			iGPU	dGPU*2	Max Resolution	Max Refresh Rate	
Raider 18 Max HX A2WH	RTX 5070Ti	V	-	TBT 5*1 x2	TBT-HDMI: 7680x4320 @60Hz TBT-DP: 7680x4320 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 5120*1440 240Hz	TBT-HDMI: 1920x1080 @600Hz TBT-DP: 1920x1080 @600Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 1920x1080 @600Hz	4*3
			-	HDMI x1	HDMI : 7680x4320 @60Hz	HDMI : 1920x1080 @600Hz	
Raider 18 Max HX A2WI	RTX 5080	V	-	TBT 5*1 x2	TBT-HDMI: 7680x4320 @60Hz TBT-DP: 7680x4320 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 5120*1440 240Hz	TBT-HDMI: 1920x1080 @600Hz TBT-DP: 1920x1080 @600Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 1920x1080 @600Hz	4*3
			-	HDMI x1	HDMI : 7680x4320 @60Hz	HDMI : 1920x1080 @600Hz	
Raider 18 Max HX A2WJ	RTX 5090	V	-	TBT 5*1 x2	TBT-HDMI: 7680x4320 @60Hz TBT-DP: 7680x4320 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 5120*1440 240Hz	TBT-HDMI: 1920x1080 @600Hz TBT-DP: 1920x1080 @600Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 1920x1080 @600Hz	4*3
			-	HDMI x1	HDMI : 7680x4320 @60Hz	HDMI : 1920x1080 @600Hz	

Note:

*1: Thunderbolt ports wired to the iGPU support external displays in MSHybrid Graphics and Integrated Graphics mode only. (<https://www.msi.com/fag/fag-4175>)

*2: VR devices will require display ports wired to the dGPU to function correctly.

Display output ports wired to the dGPU support external displays in MSHybrid Graphics and Discrete Graphics mode only.

*3: Maximum matrix display numbers are tested under MSHybrid mode.

Raider Series- 4/6

Notebook	GPU	MUX Switch	Display Ports		External Display Output		Matrix Display (incl. NB display)
			iGPU	dGPU*2	Max Resolution	Max Refresh Rate	
Raider 18 HX A2WH	RTX 5070Ti	V	-	TBT 5*1 x2	TBT-HDMI: 7680x4320 @60Hz TBT-DP: 7680x4320 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 5120*1440 240Hz	TBT-HDMI: 1920x1080 @600Hz TBT-DP: 1920x1080 @600Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 1920x1080 @600Hz	4*3
			-	HDMI x1	HDMI : 7680x4320 @60Hz	HDMI : 1920x1080 @600Hz	
Raider 18 HX A2WI	RTX 5080	V	-	TBT 5*1 x2	TBT-HDMI: 7680x4320 @60Hz TBT-DP: 7680x4320 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 5120*1440 240Hz	TBT-HDMI: 1920x1080 @600Hz TBT-DP: 1920x1080 @600Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 1920x1080 @600Hz	4*3
			-	HDMI x1	HDMI : 7680x4320 @60Hz	HDMI : 1920x1080 @600Hz	
Raider 18 HX A2WJ	RTX 5090	V	-	TBT 5*1 x2	TBT-HDMI: 7680x4320 @60Hz TBT-DP: 7680x4320 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 5120*1440 240Hz	TBT-HDMI: 1920x1080 @600Hz TBT-DP: 1920x1080 @600Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 1920x1080 @600Hz	4*3
			-	HDMI x1	HDMI : 7680x4320 @60Hz	HDMI : 1920x1080 @600Hz	

- Note:
- *1: Thunderbolt ports wired to the iGPU support external displays in MSHybrid Graphics and Integrated Graphics mode only. (<https://www.msi.com/fag/fag-4175>)
 - *2: VR devices will require display ports wired to the dGPU to function correctly.
Display output ports wired to the dGPU support external displays in MSHybrid Graphics and Discrete Graphics mode only.
 - *3: Maximum matrix display numbers are tested under MSHybrid mode.

Raider Series- 5/6

Notebook	GPU	MUX Switch	Display Ports		External Display Output		Matrix Display (incl. NB display)
			iGPU	dGPU*2	Max Resolution	Max Refresh Rate	
Raider 16 HX B2WE	RTX 5050	V	TBT 4*1 x1	-	TBT-HDMI: 7680x4320 @60Hz TBT-DP: 7680x4320 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 5120*1440 144Hz	TBT-HDMI: 2560x1440 @500Hz TBT-DP: 2560x1440 @500Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 2560x1440 @500Hz	4*3
			Type C (DP Alt) x1	-	Type C(DP)-TBT: 5120x2160 @60Hz Type C(DP)-DP: 7680x4320 @60Hz Type C(DP)-HDMI: 7680x4320 @60Hz	Type C(DP)-TBT: 5120x2160 @60Hz Type C(DP)-DP: 2560x1440 @500Hz Type C(DP)-HDMI: 2560x1440 @500Hz	
			-	HDMI x1	HDMI: 7680x4320 @60Hz	HDMI: 2560x1440 @500Hz	
Raider 16 HX B2WF	RTX 5060	V	TBT 4*1 x1	-	TBT-HDMI: 7680x4320 @60Hz TBT-DP: 7680x4320 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 5120*1440 144Hz	TBT-HDMI: 2560x1440 @500Hz TBT-DP: 2560x1440 @500Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 2560x1440 @500Hz	4*3
			Type C (DP Alt) x1	-	Type C(DP)-TBT: 5120x2160 @60Hz Type C(DP)-DP: 7680x4320 @60Hz Type C(DP)-HDMI: 7680x4320 @60Hz	Type C(DP)-TBT: 5120x2160 @60Hz Type C(DP)-DP: 2560x1440 @500Hz Type C(DP)-HDMI: 2560x1440 @500Hz	
			-	HDMI x1	HDMI: 7680x4320 @60Hz	HDMI: 2560x1440 @500Hz	

Note:

*1: Thunderbolt ports wired to the iGPU support external displays in MSHybrid Graphics and Integrated Graphics mode only. (<https://www.msi.com/faq/faq-4175>)

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Display output ports wired to the dGPU support external displays in MSHybrid Graphics and Discrete Graphics mode only.

*3: Maximum matrix display numbers are tested under MSHybrid mode.

Raider Series- 6/6

Notebook	GPU	MUX Switch	Display Ports		External Display Output		Matrix Display (incl. NB display)
			iGPU	dGPU*2	Max Resolution	Max Refresh Rate	
Raider 16 HX B2WG	RTX 5070	V	TBT 4*1 x1	-	TBT-HDMI: 7680x4320 @60Hz TBT-DP: 7680x4320 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 5120*1440 144Hz	TBT-HDMI: 2560x1440 @500Hz TBT-DP: 2560x1440 @500Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 2560x1440 @500Hz	4*3
			Type C (DP Alt) x1	-	Type C(DP)-TBT: 5120x2160 @60Hz Type C(DP)-DP: 7680x4320 @60Hz Type C(DP)-HDMI: 7680x4320 @60Hz	Type C(DP)-TBT: 5120x2160 @60Hz Type C(DP)-DP: 2560x1440 @500Hz Type C(DP)-HDMI: 2560x1440 @500Hz	
			-	HDMI x1	HDMI: 7680x4320 @60Hz	HDMI: 2560x1440 @500Hz	
Raider 16 HX B2WGX	RTX 5070	V	TBT 4*1 x1	-	TBT-HDMI: 7680x4320 @60Hz TBT-DP: 7680x4320 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 5120*1440 144Hz	TBT-HDMI: 2560x1440 @500Hz TBT-DP: 2560x1440 @500Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 2560x1440 @500Hz	4*3
			Type C (DP Alt) x1	-	Type C(DP)-TBT: 5120x2160 @60Hz Type C(DP)-DP: 7680x4320 @60Hz Type C(DP)-HDMI: 7680x4320 @60Hz	Type C(DP)-TBT: 5120x2160 @60Hz Type C(DP)-DP: 2560x1440 @500Hz Type C(DP)-HDMI: 2560x1440 @500Hz	
			-	HDMI x1	HDMI: 7680x4320 @60Hz	HDMI: 2560x1440 @500Hz	

Note:

*1: Thunderbolt ports wired to the iGPU support external displays in MSHybrid Graphics and Integrated Graphics mode only. (<https://www.msi.com/faq/faq-4175>)

*2: VR devices will require display ports wired to the dGPU to function correctly.

Display output ports wired to the dGPU support external displays in MSHybrid Graphics and Discrete Graphics mode only.

*3: Maximum matrix display numbers are tested under MSHybrid mode.

Vector Series- 1/1

Notebook	GPU	MUX Switch	Display Ports		External Display Output		Matrix Display (incl. NB display)
			iGPU	dGPU*2	Max Resolution	Max Refresh Rate	
Vector 16 HX AI A2XWJG	RTX 5090	V	-	TBT 5*1 x2	TBT-HDMI: 7680x4320 @60Hz TBT-DP: 7680x4320 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 3840x2160 @144Hz	TBT-HDMI: 2560x1440 @360Hz TBT-DP: 1920x1080 @380Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP):2560x1440 @360Hz	4*3
			-	HDMI x1	HDMI : 7680x4320 @60Hz	HDMI : 2560x1440 @360Hz	
Vector 16 HX AI A2XWIG	RTX 5080	V	-	TBT 5*1 x2	TBT-HDMI: 7680x4320 @60Hz TBT-DP: 7680x4320 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 3840x2160 @144Hz	TBT-HDMI: 2560x1440 @360Hz TBT-DP: 1920x1080 @380Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP):2560x1440 @360Hz	4*3
			-	HDMI x1	HDMI : 7680x4320 @60Hz	HDMI : 2560x1440 @360Hz	
Vector 16 HX AI A2XWHG	RTX 5070Ti	V	-	TBT 5*1 x2	TBT-HDMI: 7680x4320 @60Hz TBT-DP: 7680x4320 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 3840x2160 @144Hz	TBT-HDMI: 2560x1440 @360Hz TBT-DP: 1920x1080 @380Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP):2560x1440 @360Hz	4*3
			-	HDMI x1	HDMI : 7680x4320 @60Hz	HDMI : 2560x1440 @360Hz	

- Note:
- *1: Thunderbolt ports wired to the iGPU support external displays in MSHybrid Graphics and Integrated Graphics mode only. (<https://www.msi.com/faq/faq-4175>)
 - *2: VR devices will require display ports wired to the dGPU to function correctly.
Display output ports wired to the dGPU support external displays in MSHybrid Graphics and Discrete Graphics mode only.
 - *3: Maximum matrix display numbers are tested under MSHybrid mode.

Stealth Series- 1/2

Notebook	GPU	MUX Switch	Display Ports		External Display Output		Matrix Display (incl. NB display)
			iGPU	dGPU*2	Max Resolution	Max Refresh Rate	
Stealth 18 HX AI A2XWJG	RTX 5090	V	TBT 4*1 x2	-	TBT-HDMI: 7680x4320 @60Hz TBT-DP: 7680x4320 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 3840*2160 @160Hz	TBT-HDMI: 2560x1440 @360Hz TBT-DP: 1920x1080 @380Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP):2560x1440 @360Hz	4*3
			-	HDMI x1	HDMI : 7680x4320 @60Hz	HDMI : 3840*2160 240Hz	
Stealth 18 HX AI A2XWIG	RTX 5080	V	TBT 4*1 x2	-	TBT-HDMI: 7680x4320 @60Hz TBT-DP: 7680x4320 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 3840*2160 @160Hz	TBT-HDMI: 2560x1440 @360Hz TBT-DP: 1920x1080 @380Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP):2560x1440 @360Hz	4*3
			-	HDMI x1	HDMI : 7680x4320 @60Hz	HDMI : 3840*2160 240Hz	
Stealth 18 HX AI A2XWHG	RTX 5070Ti	V	TBT 4*1 x2	-	TBT-HDMI: 7680x4320 @60Hz TBT-DP: 7680x4320 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 3840*2160 @160Hz	TBT-HDMI: 2560x1440 @360Hz TBT-DP: 1920x1080 @380Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP):2560x1440 @360Hz	4*3
			-	HDMI x1	HDMI : 7680x4320 @60Hz	HDMI : 3840*2160 240Hz	

Note:

*1: Thunderbolt ports wired to the iGPU support external displays in MSHybrid Graphics and Integrated Graphics mode only. (<https://www.msi.com/faq/faq-4175>)

*2: VR devices will require display ports wired to the dGPU to function correctly.

Display output ports wired to the dGPU support external displays in MSHybrid Graphics and Discrete Graphics mode only.

*3: Maximum matrix display numbers are tested under MSHybrid mode.

Stealth Series- 2/2

Notebook	GPU	MUX Switch	Display Ports		External Display Output		Matrix Display (incl. NB display)
			iGPU	dGPU*2	Max Resolution	Max Refresh Rate	
Stealth 18 HX A2WH	RTX 5070Ti	V	TBT 4*1 x2	-	TBT-HDMI: 7680x4320 @60Hz TBT-DP: 7680x4320 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 5120*1440 @240Hz	TBT-HDMI: 1920x1080 @600Hz TBT-DP: 1920x1080 @600Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP):1920x1080 @600Hz	4*3
			-	HDMI x1	HDMI : 7680x4320 @60Hz	HDMI : 1920x1080 @600Hz	
Stealth 18 HX A2WI	RTX 5080	V	TBT 4*1 x2	-	TBT-HDMI: 7680x4320 @60Hz TBT-DP: 7680x4320 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 5120*1440 @240Hz	TBT-HDMI: 1920x1080 @600Hz TBT-DP: 1920x1080 @600Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP):1920x1080 @600Hz	4*3
			-	HDMI x1	HDMI : 7680x4320 @60Hz	HDMI : 1920x1080 @600Hz	
Stealth 18 HX A2WJ	RTX 5090	V	TBT 4*1 x2	-	TBT-HDMI: 7680x4320 @60Hz TBT-DP: 7680x4320 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 5120*1440 @240Hz	TBT-HDMI: 1920x1080 @600Hz TBT-DP: 1920x1080 @600Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP):1920x1080 @600Hz	4*3
			-	HDMI x1	HDMI : 7680x4320 @60Hz	HDMI : 1920x1080 @600Hz	

Note:

*1: Thunderbolt ports wired to the iGPU support external displays in MSHybrid Graphics and Integrated Graphics mode only. (<https://www.msi.com/faq/faq-4175>)

*2: VR devices will require display ports wired to the dGPU to function correctly.

Display output ports wired to the dGPU support external displays in MSHybrid Graphics and Discrete Graphics mode only.

*3: Maximum matrix display numbers are tested under MSHybrid mode.

Crosshair Series – 1/3

Notebook	GPU	MUX Switch	Display Ports		External Display Output		Matrix Display (incl. NB display)
			iGPU	dGPU*2	Max Resolution	Max Refresh Rate	
Crosshair 16 HX AI D2XWGKG	RTX 5070	V	TBT 4*1 x1	-	TBT Type C(DP)-TBT: 5120*1440 144Hz TBT-TBT: 5120x2160 @60Hz TBT-DP: 7680x4320 @60Hz TBT-HDMI: 7680x4320 @60Hz	TBT Type C(DP)-TBT: 2560*1440 @360Hz TBT-TBT: 5120x2160 @60Hz TBT-DP: 1920x1080 @380Hz TBT-HDMI: 2560x1440 @360Hz	3*3
			-	HDMI x 1	HDMI-HDMI: 7680x4320 @60Hz	HDMI-HDMI: 2560x1440 @360Hz	
Crosshair 16 HX AI D2XWFKG	RTX 5060	V	TBT 4*1 x1	-	TBT Type C(DP)-TBT: 5120*1440 144Hz TBT-TBT: 5120x2160 @60Hz TBT-DP: 7680x4320 @60Hz TBT-HDMI: 7680x4320 @60Hz	TBT Type C(DP)-TBT: 2560*1440 @360Hz TBT-TBT: 5120x2160 @60Hz TBT-DP: 1920x1080 @380Hz TBT-HDMI: 2560x1440 @360Hz	3*3
			-	HDMI x 1	HDMI-HDMI: 7680x4320 @60Hz	HDMI-HDMI: 2560x1440 @360Hz	

Note:

*1: Thunderbolt ports wired to the iGPU support external displays in MSHybrid Graphics and Integrated Graphics mode only. (<https://www.msi.com/faq/faq-4175>)

*2: VR devices will require display ports wired to the dGPU to function correctly.

Display output ports wired to the dGPU support external displays in MSHybrid Graphics and Discrete Graphics mode only.

*3: Maximum matrix display numbers are tested under MSHybrid mode.

Crosshair Series – 2/3

Notebook	GPU	MUX Switch	Display Ports		External Display Output		Matrix Display (incl. NB display)
			iGPU	dGPU*2	Max Resolution	Max Refresh Rate	
Crosshair 17 HX AI D2XWGKG	RTX 5070	V	TBT 4*1 x1	-	TBT Type C(DP)-TBT: 5120*1440 144Hz TBT-TBT: 5120x2160 @60Hz TBT-DP: 7680x4320 @60Hz TBT-HDMI: 7680x4320 @60Hz	TBT Type C(DP)-TBT: 2560*1440 @360Hz TBT-TBT: 5120x2160 @60Hz TBT-DP: 1920x1080 @380Hz TBT-HDMI: 2560x1440 @360Hz	3*3
			-	HDMI x 1	HDMI-HDMI: 7680x4320 @60Hz	HDMI-HDMI: 2560x1440 @360Hz	
Crosshair 17 HX AI D2XWFKG	RTX 5060	V	TBT 4*1 x1	-	TBT Type C(DP)-TBT: 5120*1440 144Hz TBT-TBT: 5120x2160 @60Hz TBT-DP: 7680x4320 @60Hz TBT-HDMI: 7680x4320 @60Hz	TBT Type C(DP)-TBT: 2560*1440 @360Hz TBT-TBT: 5120x2160 @60Hz TBT-DP: 1920x1080 @380Hz TBT-HDMI: 2560x1440 @360Hz	3*3
			-	HDMI x 1	HDMI-HDMI: 7680x4320 @60Hz	HDMI-HDMI: 2560x1440 @360Hz	

Note:

*1: Thunderbolt ports wired to the iGPU support external displays in MSHybrid Graphics and Integrated Graphics mode only. (<https://www.msi.com/faq/faq-4175>)

*2: VR devices will require display ports wired to the dGPU to function correctly.

Display output ports wired to the dGPU support external displays in MSHybrid Graphics and Discrete Graphics mode only.

*3: Maximum matrix display numbers are tested under MSHybrid mode.

Crosshair Series – 3/3

Notebook	GPU	MUX Switch	Display Ports		External Display Output		Matrix Display (incl. NB display)
			iGPU	dGPU*1	Max Resolution	Max Refresh Rate	
Crosshair 18 HX AI A2XWGKG	RTX 5070	V	TBT 4*2 x1	-	TBT Type C(DP)-TBT: 5120*1440 144Hz TBT-TBT: 5120x2160 @60Hz TBT-DP: 7680x4320 @60Hz TBT-HDMI: 7680x4320 @60Hz	TBT Type C(DP)-TBT: 2560*1440 @360Hz TBT-TBT: 5120x2160 @60Hz TBT-DP: 1920x1080 @380Hz TBT-HDMI: 2560x1440 @360Hz	3*3
			-	HDMI x 1	HDMI-HDMI: 7680x4320 @60Hz	HDMI-HDMI: 2560x1440 @360Hz	
Crosshair 18 HX AI A2XWFKG	RTX 5060	V	TBT 4*2 x1	-	TBT Type C(DP)-TBT: 5120*1440 144Hz TBT-TBT: 5120x2160 @60Hz TBT-DP: 7680x4320 @60Hz TBT-HDMI: 7680x4320 @60Hz	TBT Type C(DP)-TBT: 2560*1440 @360Hz TBT-TBT: 5120x2160 @60Hz TBT-DP: 1920x1080 @380Hz TBT-HDMI: 2560x1440 @360Hz	3*3
			-	HDMI x 1	HDMI-HDMI: 7680x4320 @60Hz	HDMI-HDMI: 2560x1440 @360Hz	

Note:

*1: Thunderbolt ports wired to the iGPU support external displays in MSHybrid Graphics and Integrated Graphics mode only. (<https://www.msi.com/faq/faq-4175>)

*2: VR devices will require display ports wired to the dGPU to function correctly.

Display output ports wired to the dGPU support external displays in MSHybrid Graphics and Discrete Graphics mode only.

*3: Maximum matrix display numbers are tested under MSHybrid mode.

Cyborg Series – 1/2

Notebook	GPU	MUX Switch	Display Ports		External Display Output		Matrix Display (incl. NB display)
			iGPU	dGPU*1	Max Resolution	Max Refresh Rate	
Cyborg 15 Max C2WG	RTX 5070	-	-	Type-C w/DP x1	Type C-HDMI: 7680*2160 240Hz Type C-DP: 7680*2160 240Hz Type C-Type C(DP): 5120*1440 240Hz	Type C-HDMI: 1920x1080 @600Hz Type C-DP: 1920x1080 @600Hz Type C-Type C(DP): 1920x1080 @600Hz	3*3
			-	HDMI x1	HDMI: 7680*2160 240Hz	HDMI: 1920x1080 @600Hz	
Cyborg 15 Max C2WF	RTX 5060	-	-	Type-C w/DP x1	Type C-HDMI: 7680*2160 240Hz Type C-DP: 7680*2160 240Hz Type C-Type C(DP): 5120*1440 240Hz	Type C-HDMI: 1920x1080 @600Hz Type C-DP: 1920x1080 @600Hz Type C-Type C(DP): 1920x1080 @600Hz	3*3
			-	HDMI x1	HDMI: 7680*2160 240Hz	HDMI: 1920x1080 @600Hz	
Cyborg 15 Max C2WE	RTX 5050	-	-	Type-C w/DP x1	Type C-HDMI: 7680*2160 240Hz Type C-DP: 7680*2160 240Hz Type C-Type C(DP): 5120*1440 240Hz	Type C-HDMI: 1920x1080 @600Hz Type C-DP: 1920x1080 @600Hz Type C-Type C(DP): 1920x1080 @600Hz	3*3
			-	HDMI x1	HDMI: 7680*2160 240Hz	HDMI: 1920x1080 @600Hz	
Cyborg 15 C2WF	RTX 5060	-	-	Type-C w/DP x1	Type C-HDMI: 7680*2160 240Hz Type C-DP: 7680*2160 240Hz Type C-Type C(DP): 5120*1440 240Hz	Type C-HDMI: 1920x1080 @600Hz Type C-DP: 1920x1080 @600Hz Type C-Type C(DP): 1920x1080 @600Hz	3*3
			-	HDMI x1	HDMI: 7680*2160 240Hz	HDMI: 1920x1080 @600Hz	

- Note:
- *1: Thunderbolt ports wired to the iGPU support external displays in MSHybrid Graphics and Integrated Graphics mode only. (<https://www.msi.com/faq/faq-4175>)
 - *2: VR devices will require display ports wired to the dGPU to function correctly.
Display output ports wired to the dGPU support external displays in MSHybrid Graphics and Discrete Graphics mode only.
 - *3: Maximum matrix display numbers are tested under MSHybrid mode.

Cyborg Series – 2/2

Notebook	GPU	MUX Switch	Display Ports		External Display Output		Matrix Display (incl. NB display)
			iGPU	dGPU* ¹	Max Resolution	Max Refresh Rate	
Cyborg 15 C2WE	RTX 5050	-	-	Type-C w/DP x1	Type C-HDMI: 7680*2160 240Hz Type C-DP: 7680*2160 240Hz Type C-Type C(DP): 5120*1440 240Hz	Type C-HDMI: 1920x1080 @600Hz Type C-DP: 1920x1080 @600Hz Type C-Type C(DP): 1920x1080 @600Hz	3* ³
			-	HDMI x1	HDMI: 7680*2160 240Hz	HDMI: 1920x1080 @600Hz	

Note:

*1: Thunderbolt ports wired to the iGPU support external displays in MSHybrid Graphics and Integrated Graphics mode only. (<https://www.msi.com/faq/faq-4175>)

*2: VR devices will require display ports wired to the dGPU to function correctly.

Display output ports wired to the dGPU support external displays in MSHybrid Graphics and Discrete Graphics mode only.

*3: Maximum matrix display numbers are tested under MSHybrid mode.

Summit Series – 1/3

Notebook	GPU	MUX Switch	Display Ports		External Display Output		Matrix Display (incl. NB display)
			iGPU	dGPU	Max Resolution	Max Refresh Rate	
Summit 13 AI+ Evo A2VM	UMA	X	TBT ^{*1} x2	-	TBT Type C(DP)- TBT: 3840x2160 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-DP: 7680x4320 @60Hz TBT-Type C: 2560*1440 @75Hz	TBT Type C(DP)-TBT: 2560*1440 @240Hz TBT-TBT: 5120x2160 @60Hz DP:1920x1080 @360Hz TBT-Type C: 2560*1440 @75Hz	4* ²
			HDMI x 1	-	HDMI-HDMI: 7680x4320 @60Hz	HDMI-HDMI: 1920x1080 @240Hz	
Summit 16 AI Evo A2HMTG	UMA	X	TBT ^{*1} x2	-	TBT Type C(DP)- TBT: 3840x2160 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-DP: 7680x4320 @60Hz TBT-HDMI: 7680x4320 @60Hz TBT-Type C: 2560*1440 @75Hz	TBT Type C(DP)-TBT: 2560*1440 @240Hz TBT-TBT: 5120x2160 @60Hz DP:1920x1080 @360Hz TBT-HDMI: 1920x1080 @240Hz TBT-Type C: 2560*1440 @75Hz	4* ²
			HDMI x 1	-	HDMI-HDMI: 3840x2160 @60Hz	HDMI-HDMI: 1920x1080 @240Hz	

Note:

*1: Thunderbolt ports wired to the iGPU support external displays in MSHybrid Graphics and Integrated Graphics mode only. (<https://www.msi.com/faq/faq-4175>)

*2: Maximum matrix display numbers are tested under MSHybrid mode.

Summit Series – 2/3

Notebook	GPU	MUX Switch	Display Ports		External Display Output		Matrix Display (incl. NB display)
			iGPU	dGPU* ¹	Max Resolution	Max Refresh Rate	
SummitPro 16 AI A2HVETG	RTX4050	-	TBT* ² x1		TBT-DP: 7680x4320 @60Hz TBT-HDMI: 7680x4320 @60Hz TBT-TBT: 5120x2160 @60Hz TBT Type C(DP)- TBT: 3840x2160 @60Hz	TBT-DP: 1920x1080 @360Hz TBT-HDMI: 1920x1080 @240Hz TBT-TBT: 5120x2160 @60Hz TBT Type C(DP)- TBT: 2560*1440 @240Hz	4* ³
			Type C (DP Alt) x1		Type C(DP)-TBT: 5120x2160 @60Hz Type C(DP)-DP: 5120x2160 @60Hz Type C(DP)-HDMI: 7680x4320 @60Hz	Type C(DP)-TBT: 2560*1440 @240Hz Type C(DP)-DP: 1920x1080 @360Hz Type C(DP)-HDMI: 1920x1080 @180Hz	
				HDMI x 1	HDMI-HDMI: 7680x4320 @60Hz	HDMI-HDMI: 1920x1080 @240Hz	

Note:

*1: VR devices will require display ports wired to the dGPU to function correctly.

Display output ports wired to the dGPU support external displays in MSHybrid Graphics and Discrete Graphics mode only.

*2: Thunderbolt ports wired to the iGPU support external displays in MSHybrid Graphics and Integrated Graphics mode only. (<https://www.msi.com/faq/faq-4175>)

*3: Maximum matrix display numbers are tested under MSHybrid mode.

Summit Series – 3/3

Notebook	GPU	MUX Switch	Display Ports		External Display Output		Matrix Display (incl. NB display)
			iGPU	dGPU	Max Resolution	Max Refresh Rate	
Summit E16 AI Evo A2HMTG	UMA	X	TBT* ¹ x2		TBT Type C(DP)- TBT: 3840x2160 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-DP: 7680x4320 @60Hz TBT-HDMI: 7680x4320 @60Hz TBT-Type C: 2560*1440 @75Hz	TBT Type C(DP)-TBT: 2560*1440 @240Hz TBT-TBT: 5120x2160 @60Hz DP:1920x1080 @360Hz TBT-HDMI: 1920x1080 @240Hz TBT-Type C: 2560*1440 @75Hz	4* ²
			HDMI x 1		HDMI-HDMI: 7680x4320 @60Hz	HDMI-HDMI: 1920x1080 @240Hz	
Summit E13 AI Evo A2HMTG	UMA	X	TBT* ¹ x2	-	TBT Type C(DP)- TBT: 3840x2160 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-DP: 7680x4320 @60Hz TBT-Type C: 2560*1440 @75Hz	TBT Type C(DP)-TBT: 2560*1440 @240Hz TBT-TBT: 5120x2160 @60Hz DP:1920x1080 @360Hz TBT-Type C: 2560*1440 @75Hz	4* ²
			HDMI x 1	-	HDMI-HDMI: 7680x4320 @60Hz	HDMI-HDMI: 1920x1080 @240Hz	

Note:

*1: Thunderbolt ports wired to the iGPU support external displays in MSHybrid Graphics and Integrated Graphics mode only. (<https://www.msi.com/faq/faq-4175>)

*2: Maximum matrix display numbers are tested under MSHybrid mode.

Prestige Series – 1/3

Notebook	GPU	MUX Switch	Display Ports		External Display Output		Matrix Display (incl. NB display)
			iGPU	dGPU	Max Resolution	Max Refresh Rate	
Prestige 13 AI+ Evo A2VM	UMA	X	TBT 4 ^{*1} x1	-	TBT-DP: 5120x2160 @60Hz TBT-type-C(TB/DP): 5120x2160 @60Hz	TBT-DP: 1920x1080 @380Hz TBT-type-C(TB/DP): 1920x1080 @380Hz	4 ^{*2}
			HDMI x1	-	HDMI : 7680x4320 @60Hz	HDMI : 1920x1080 @240Hz	
Prestige 13 AI Evo A2HMG	UMA	X	TBT 4 ^{*2} x1	-	TBT-DP: 5120x2160 @60Hz TBT-type-C(TB/DP): 5120x2160 @60Hz	TBT-DP: 1920x1080 @380Hz TBT-type-C(TB/DP): 1920x1080 @380Hz	4 ^{*2}
			HDMI x1	-	HDMI : 7680x4320 @60Hz	HDMI : 1920x1080 @240Hz	

Note:

*1: Thunderbolt ports wired to the iGPU support external displays in MSHybrid Graphics and Integrated Graphics mode only. (<https://www.msi.com/faq/faq-4175>)

*2: Maximum matrix display numbers are tested under MSHybrid mode.

Prestige Series – 2/3

Notebook	GPU	MUX Switch	Display Ports		External Display Output		Matrix Display (incl. NB display)
			iGPU	dGPU*2	Max Resolution	Max Refresh Rate	
Prestige 14 AI+ Evo C2VMG	UMA	X	TBT 4*1 x2	-	TBT-DP: 7860x4320 @60Hz TBT-type-C(TB/DP): 5120x1440 @144Hz	TBT-DP: 1920x1080 @380Hz TBT-type-C(TB/DP): 2560x1440 @360Hz	4*3
			HDMI x1	-	HDMI : 7680x4320 @60Hz	HDMI : 2560x1440 @360Hz	
Prestige 14 AI Evo C2HMG	UMA	X	TBT 4*1 x2	-	TBT-DP: 7680x4320 @60Hz TBT-HDMI: 7680x4320 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-type-C(TB/DP): 5120*1440 @144Hz	TBT-DP: 1920x1080 @380Hz TBT-HDMI: 2560x1440 @360Hz TBT-TBT: 5120x2160 @60Hz TBT-type-C(TB/DP): 2560*1440 @360Hz	4*3
			HDMI x1	-	HDMI: 7680x4320 @60Hz	HDMI : 2560x1440 @360Hz	
PrestigePro 14 AI C2HVEG	RTX 4050	X	TBT 4*1 x1	-	TBT-DP: 7680x4320 @60Hz TBT-HDMI: 7680x4320 @60Hz TBT-type-C(DP): 5120*1440 @144Hz	TBT-DP: 1920x1080 @380Hz TBT-HDMI: 2560x1440 @360Hz TBT-type-C(DP): 2560*1440 @360Hz	4*3
			Type C (DP Alt) x1	-	Type-C(DP)-DP: 7680x4320 @60Hz Type-C(DP)-HDMI: 7680x4320 @60Hz Type-C(DP)-type-C(DP): 5120*1440 @144Hz	Type-C(DP)-DP: 1920x1080 @380Hz Type-C(DP)-HDMI: 2560x1440 @360Hz Type-C(DP)-type-C(DP): 2560*1440 @360Hz	
			-	HDMI x1	HDMI: 7680x4320 @60Hz	HDMI: 2560x1440 @360Hz	

Note:

*1: Thunderbolt ports wired to the iGPU support external displays in MSHybrid Graphics and Integrated Graphics mode only. (<https://www.msi.com/faq/faq-4175>)

*2: VR devices will require display ports wired to the dGPU to function correctly.

Display output ports wired to the dGPU support external displays in MSHybrid Graphics and Discrete Graphics mode only.

*3: Maximum matrix display numbers are tested under MSHybrid mode.

Prestige Series – 3/3

Notebook	GPU	MUX Switch	Display Ports		External Display Output		Matrix Display (incl. NB display)
			iGPU	dGPU*2	Max Resolution	Max Refresh Rate	
Prestige 16AI+Evo B2VMG	UMA	X	TBT 4*1 x2	-	TBT-HDMI: 7680x4320 @60Hz TBT-DP: 7680x4320 @60Hz	TBT-HDMI: 1920x1080 @240Hz TBT-DP: 1920x1080 @380Hz	4*3
			HDMI x1	-	HDMI-HDMI: 7680x4320 @60Hz	HDMI-HDMI: 1920x1080 @240Hz	
Prestige 16 AI Evo B2HMG	UMA	X	TBT 4*1 x2	-	TBT-DP: 7680x4320 @60Hz TBT-HDMI: 7680x4320 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-Type-C(DP): 5120x2160 @60Hz	TBT-DP: 1920x1080 @380Hz TBT-HDMI: 2560x1440 @360Hz TBT-TBT: 5120x2160 @60Hz TBT-Type-C(DP): 2560*1440 @360Hz	3*3
			HDMI x1	-	HDMI:7680x4320 @60Hz	HDMI: 2560x1440 @360Hz	
PrestigePro 16 AI B2HVEG	RTX 4050	X	TBT 4*1	-	TBT-DP: 7680x4320 @60Hz TBT-HDMI: 7680x4320 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-Type-C(DP): 5120*1440 @144Hz	TBT-DP: 1920x1080 @380Hz TBT-HDMI: 2560x1440 @360Hz TBT-TBT: 5120x2160 @60Hz TBT-Type-C(DP): 2560*1440 @360Hz	4*3
			Type C (DP Alt) x1	-	Type-C(DP)-DP: 7680x4320 @60Hz Type-C(DP)-HDMI: 7680x4320 @60Hz Type-C(DP)-Type-C(DP): 5120*1440 @144Hz	Type-C(DP)-DP: 1920x1080 @380Hz Type-C(DP)-HDMI: 2560x1440 @360Hz Type-C(DP)-Type-C(DP): 2560*1440 @360Hz	
			-	HDMI x1	HDMI: 3840x2160 @60Hz	HDMI: 2560x1440 @360Hz	

Note:

*1: Thunderbolt ports wired to the iGPU support external displays in MSHybrid Graphics and Integrated Graphics mode only. (<https://www.msi.com/faq/faq-4175>)

*2: VR devices will require display ports wired to the dGPU to function correctly.

Display output ports wired to the dGPU support external displays in MSHybrid Graphics and Discrete Graphics mode only.

*3: Maximum matrix display numbers are tested under MSHybrid mode.

Venture Series – 1/3

Notebook	GPU	MUX Switch	Display Ports		External Display Output		Matrix Display (incl. NB display)
			iGPU	dGPU*1	Max Resolution	Max Refresh Rate	
VenturePro 17 AI A2HVEG	RTX 4050	X	Type C (DP Alt) x1	-	Type C(DP)-TBT: 5120x2160 @60Hz Type C(DP)-DP: 7680x4320 @60Hz Type C(DP)-HDMI: 7680x4320 @60Hz	Type C(DP)-TBT: 5120x2160 @60Hz Type C(DP)-DP: 2560x1440 @165Hz Type C(DP)-HDMI: 3840x2160 @120Hz	3
			HDMI x 1*2		HDMI-HDMI: 4096x2160 @60Hz	HDMI-HDMI: 3840x2160 @120Hz	
VenturePro 17 AI A2HUDXG	RTX 3050	X	Type C (DP Alt) x1	-	Type C(DP)-TBT: 5120x2160 @60Hz Type C(DP)-DP: 7680x4320 @60Hz Type C(DP)-HDMI: 7680x4320 @60Hz	Type C(DP)-TBT: 5120x2160 @60Hz Type C(DP)-DP: 2560x1440 @165Hz Type C(DP)-HDMI: 3840x2160 @120Hz	3
			HDMI x 1*2		HDMI-HDMI: 4096x2160 @60Hz	HDMI-HDMI: 3840x2160 @120Hz	
VenturePro 16 AI A2HVEG	RTX 4050	X	Type C (DP Alt) x1	-	Type C(DP)-Type C: 5120*1440 144Hz Type C(DP)-DP: 7680x4320 @60Hz Type C(DP)-HDMI: 7680x4320 @60Hz	Type C(DP)-Type C: 2560*1440 @360Hz Type C(DP)-DP: 2560x1440 @360Hz Type C(DP)-HDMI: 2560x1440 @360Hz	3
			HDMI x 1*2		HDMI-HDMI: 4096x2160 @60Hz	HDMI-HDMI: 2560x1440 @360Hz	
VenturePro 16 AI A2HUDXG	RTX 3050	X	Type C (DP Alt) x1	-	Type C(DP)-Type C: 5120*1440 144Hz Type C(DP)-DP: 7680x4320 @60Hz Type C(DP)-HDMI: 7680x4320 @60Hz	Type C(DP)-Type C: 2560*1440 @360Hz Type C(DP)-DP: 2560x1440 @360Hz Type C(DP)-HDMI: 2560x1440 @360Hz	3
			HDMI x 1*2		HDMI-HDMI: 4096x2160 @60Hz	HDMI-HDMI: 1920x1080 @240Hz	

Note:

*1: VR devices will require display ports wired to the dGPU to function correctly.

*2: HDMI port can connect to an external display via either the iGPU or dGPU, and which graphics card the display output is wired to depends on the Battery Boost setting in MSI Center S.

Venture Series – 2/3

Notebook	GPU	MUX Switch	Display Ports		External Display Output		Matrix Display (incl. NB display)
			iGPU	dGPU*1	Max Resolution	Max Refresh Rate	
VenturePro 15 AI A2HVEG	RTX 4050	X	Type C (DP Alt) x1	-	Type C(DP)-TBT: 5120*1440 144Hz Type C(DP)-DP: 7680x4320 @60Hz Type C(DP)-HDMI: 7680x4320 @60Hz	Type C(DP)-TBT: 2560*1440 @360Hz Type C(DP)-DP: 1920x1080 @380Hz Type C(DP)-HDMI: 1920x1080 @240Hz	3
			HDMI x 1*2		HDMI-HDMI: 4096x2160 @60Hz	HDMI-HDMI: 1920x1080 @240Hz	
VenturePro 15 AI A2HUDXG	RTX 3050	X	Type C (DP Alt) x1	-	Type C(DP)-TBT: 5120*1440 144Hz Type C(DP)-DP: 7680x4320 @60Hz Type C(DP)-HDMI: 7680x4320 @60Hz	Type C(DP)-TBT: 2560*1440 @360Hz Type C(DP)-DP: 1920x1080 @380Hz Type C(DP)-HDMI: 1920x1080 @240Hz	3
			HDMI x 1*2		HDMI-HDMI: 4096x2160 @60Hz	HDMI-HDMI: 1920x1080 @240Hz	

Note:

*1: VR devices will require display ports wired to the dGPU to function correctly.

*2: HDMI port can connect to an external display via either the iGPU or dGPU, and which graphics card the display output is wired to depends on the Battery Boost setting in MSI Center S.

Venture Series – 3/3

Notebook	GPU	MUX Switch	Display Ports		External Display Output		Matrix Display (incl. NB display)
			iGPU	dGPU	Max Resolution	Max Refresh Rate	
Venture 16 AI A2HMG	UMA	-	Type C (DP Alt) x1	-	Type C(DP)-Type C: 5120*1440 144Hz Type C(DP)-DP: 7680x4320 @60Hz Type C(DP)-HDMI: 7680x4320 @60Hz	Type C(DP)-Type C: 2560*1440 @360Hz Type C(DP)-DP: 2560*1440 @360Hz Type C(DP)-HDMI: 2560*1440 @360Hz	3
			HDMI x 1	-	HDMI-HDMI: 4096x2160 @60Hz	HDMI-HDMI: 1920x1080 @240Hz	
Venture 14 AI A2HMG	UMA	-	Type C (DP Alt) x1	-	Type C(DP)-Type C: 5120*1440 144Hz Type C(DP)-DP: 7680x4320 @60Hz Type C(DP)-HDMI: 7680x4320 @60Hz	Type C(DP)-Type C: 2560*1440 @360Hz Type C(DP)-DP: 1920x1080 @380Hz Type C(DP)-HDMI: :2560x1440 @360Hz	3
			HDMI x 1	-	HDMI-HDMI: 4096x2160 @60Hz	HDMI-HDMI: 1920x1080 @240Hz	

Claw Series

Notebook	GPU	MUX Switch	Display Ports		External Display Output		Matrix Display (incl. NB display)
			iGPU	dGPU	Max Resolution	Max Refresh Rate	
Claw 7 AI+ A2VM	iGPU	-	TBT 4*1*2	-	TBT-HDMI: 7680x4320 @60Hz TBT-DP: 7680x4320 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 3840x2160 @144Hz	TBT-HDMI: 1920x1080 @240Hz TBT-DP: 1920x1080 @360Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP):2560x1440 @240Hz	3*2
Claw 8 AI+ A2VM	iGPU	-	TBT 4*1*2	-	TBT-HDMI: 7680x4320 @60Hz TBT-DP: 7680x4320 @60Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP): 3840x2160 @144Hz	TBT-HDMI: 1920x1080 @240Hz TBT-DP: 1920x1080 @360Hz TBT-TBT: 5120x2160 @60Hz TBT-Type C(DP):2560x1440 @240Hz	3*2

Note:

*1: Thunderbolt ports wired to the iGPU support external displays in MSHybrid Graphics and Integrated Graphics mode only. (<https://www.msi.com/faq/faq-4175>)

*2: Maximum matrix display numbers are tested under MSHybrid mode.