



msi

GE/GP/GF/GL/GV Series
Gaming Notebook
with 11th/10th/9th/8th Gen.
Intel Core Processor

Video Output Information

1. In the External Display Output column, you can find the supported resolution and the refresh rate when connecting to the display port.

2. Video Output column shows the number of the output connector and its supported version.

*TB: Thunderbolt 3 features high-definition video transmission and compatible with Display Port 1.2.

3. See the list of used abbreviations in the right table.

4. In order to achieve the 3D BD playback, the notebook unit must meet the below requirements.

- A Blu-ray Optical Drive which is capable of 2X or faster read speeds.
- A video player software which supports the 3D/3D 4K BD playback.
(For example the PowerDVD Ultra version or any other 3D software player.)

5. To know which graphics is the display port connecting with:

- Models with Optimus structure: Check the connected graphics in the “Set PhysX Configuration” page in NVIDIA Control Panel.
- Other non-Optimus structure models (hardware switchable graphics) like GT72/GT80, the connected graphics depends on the GPU mode (iGPU: Intel GPU/dGPU: NVIDIA GPU).

External Display Output	
4Kx2K	120Hz
HDMI: 4096x2160 @60Hz mDP: 3840x2160 @60Hz TB-HDMI: 4096x2160 @30Hz TB-DP:2560x1440 @144Hz	mDP: 2560x1440 @144Hz TB-DP:2560x1440 @144Hz

Video Output		
mDP	HDMI	TB*
1 (v1.2)	1	0

Acronym	Description
DP/mDP	DisplayPort/Mini DisplayPort
DVI	Digital Visual Interface
HDMI	High-Definition Multimedia Interface
BD	Blu-ray Disc
TB	Thunderbolt

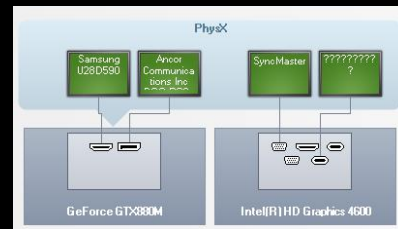


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P.S. To find the display output information for other series, please visit [Knowledge Base_1661](#).

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P.S. To find the display output information for other series, please visit [Knowledge Base_1661](#).

GE Series with 11th Gen. Intel Core Processor - 1/2

Notebook	Graphics	Video Output			External Display Output		3D BD Playback	NVIDIA Surround View ^{*3}	Matrix Display (Incl. NB display)
		mDP	HDMI	TB	4Kx2K	120Hz			
GE76 Raider 11UH	RTX 3080	1	1	1	HDMI ^{*1} : 3840x2160 @60Hz TB-HDMI: 3840x2160 @60Hz mDP-DP: 5120x2160 @60Hz TB-DP: 5120x2160 @60Hz TB-Type C(TB/DP): 5120x2160Hz @60Hz	HDMI ^{*1} : 1920x1080 @240Hz TB-HDMI: 1920x1080 @240Hz mDP-DP: 1920x1080 @240Hz TB-DP: 1920x1080 @240Hz TB-Type C(TB/DP): 1920x1080 @240Hz	X ^{*2}	✓	4
GE76 Raider 11UG	RTX 3070	1	1	1	HDMI ^{*1} : 3840x2160 @60Hz TB-HDMI: 3840x2160 @60Hz mDP-DP: 5120x2160 @60Hz TB-DP: 5120x2160 @60Hz TB-Type C(TB/DP): 5120x2160Hz @60Hz	HDMI ^{*1} : 1920x1080 @240Hz TB-HDMI: 1920x1080 @240Hz mDP-DP: 1920x1080 @240Hz TB-DP: 1920x1080 @240Hz TB-Type C(TB/DP): 1920x1080 @240Hz	X ^{*2}	✓	4
GE76 Raider 11UE	RTX 3060	1	1	1	HDMI ^{*1} : 3840x2160 @60Hz TB-HDMI: 3840x2160 @60Hz mDP-DP: 5120x2160 @60Hz TB-DP: 5120x2160 @60Hz TB-Type C(TB/DP): 5120x2160Hz @60Hz	HDMI ^{*1} : 1920x1080 @240Hz TB-HDMI: 1920x1080 @240Hz mDP-DP: 1920x1080 @240Hz TB-DP: 1920x1080 @240Hz TB-Type C(TB/DP): 1920x1080 @240Hz	X ^{*2}	✓	4

*1: A native HDMI 2.0 with 4K resolution display supported monitor is necessary in order to achieve the 4K @60Hz display output.

*2: Additional requirements are needed, please refer to the point 4 on page 1.

*3: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GE Series with 11th Gen. Intel Core Processor - 2/2

Notebook	Graphics	Video Output			External Display Output		3D BD Playback	NVIDIA Surround View ^{*3}	Matrix Display (Incl. NB display)
		mDP	HDMI	TB	4Kx2K	120Hz			
GE66 Raider 11UH	RTX 3080	1	1	1	HDMI ^{*1} : 3840x2160 @60Hz TB-HDMI: 3840x2160 @60Hz mDP-DP: 5120x2160 @60Hz TB-DP: 5120x2160 @60Hz TB-Type C(TB/DP): 5120x2160Hz @60Hz	HDMI ^{*1} : 1920x1080 @240Hz TB-HDMI: 1920x1080 @240Hz mDP-DP: 1920x1080 @240Hz TB-DP: 1920x1080 @240Hz TB-Type C(TB/DP): 1920x1080 @240Hz	X ^{*2}	✓	4
GE66 Raider 11UG	RTX 3070	1	1	1	HDMI ^{*1} : 3840x2160 @60Hz TB-HDMI: 3840x2160 @60Hz mDP-DP: 5120x2160 @60Hz TB-DP: 5120x2160 @60Hz TB-Type C(TB/DP): 5120x2160Hz @60Hz	HDMI ^{*1} : 1920x1080 @240Hz TB-HDMI: 1920x1080 @240Hz mDP-DP: 1920x1080 @240Hz TB-DP: 1920x1080 @240Hz TB-Type C(TB/DP): 1920x1080 @240Hz	X ^{*2}	✓	4
GE66 Raider 11UE	RTX 3060	1	1	1	HDMI ^{*1} : 3840x2160 @60Hz TB-HDMI: 3840x2160 @60Hz mDP-DP: 5120x2160 @60Hz TB-DP: 5120x2160 @60Hz TB-Type C(TB/DP): 5120x2160Hz @60Hz	HDMI ^{*1} : 1920x1080 @240Hz TB-HDMI: 1920x1080 @240Hz mDP-DP: 1920x1080 @240Hz TB-DP: 1920x1080 @240Hz TB-Type C(TB/DP): 1920x1080 @240Hz	X ^{*2}	✓	4

*1: A native HDMI 2.0 with 4K resolution display supported monitor is necessary in order to achieve the 4K @60Hz display output.

*2: Additional requirements are needed, please refer to the point 4 on page 1.

*3: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GP Series with 11th Gen. Intel Core Processor - 1/1

Notebook	Graphics	Video Output		External Display Output		3D BD Playback	NVIDIA Surround View ^{*3}	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
GP76 Leopard 11UG	RTX 3070	1	1	HDMI ^{*1} : 3840x2160 @60Hz mDP-DP: 5120x2160 @60Hz	HDMI ^{*1} : 1920x1080 @240Hz mDP-DP: 1920x1080 @240Hz	X ^{*2}	✓	3
GP66 Leopard 11UG	RTX 3070	1	1	HDMI ^{*1} : 3840x2160 @60Hz mDP-DP: 5120x2160 @60Hz	HDMI ^{*1} : 1920x1080 @240Hz mDP-DP: 1920x1080 @240Hz	X ^{*2}	✓	3
GP66 Leopard 11UH	RTX 3080	1	1	HDMI ^{*1} : 3840x2160 @60Hz mDP-DP: 5120x2160 @60Hz	HDMI ^{*1} : 1920x1080 @240Hz mDP-DP: 1920x1080 @240Hz	X ^{*2}	✓	3

*1: A native HDMI 2.0 with 4K resolution display supported monitor is necessary in order to achieve the 4K @60Hz display output.

*2: Additional requirements are needed, please refer to the point 4 on page 1.

*3: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

Pulse GL Series with 11th Gen. Intel Core Processor - 1/2

Notebook	Graphics	Video Output		External Display Output		3D BD Playback	NVIDIA Surround View ^{*3}	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
Pulse GL66 11UGKV	RTX 3070	-	1	HDMI ^{*1} : 4096x2160 @60Hz	HDMI ^{*1} : 1920x1080 @240Hz	X ^{*2}	X	2
Pulse GL66 11UGK	RTX 3070	-	1	HDMI ^{*1} : 4096x2160 @60Hz	HDMI ^{*1} : 1920x1080 @240Hz	X ^{*2}	X	2
Pulse GL66 11UEK	RTX 3060	-	1	HDMI ^{*1} : 4096x2160 @60Hz	HDMI ^{*1} : 1920x1080 @240Hz	X ^{*2}	X	2
Pulse GL66 11UDK	RTX 3050 Ti	-	1	HDMI ^{*1} : 4096x2160 @60Hz	HDMI ^{*1} : 1920x1080 @240Hz	X ^{*2}	X	2
Pulse GL66 11UCK	RTX 3050	-	1	HDMI ^{*1} : 4096x2160 @60Hz	HDMI ^{*1} : 1920x1080 @240Hz	X ^{*2}	X	2

*1: A native HDMI 2.0 with 4K resolution display supported monitor is necessary in order to achieve the 4K @60Hz display output.

*2: Additional requirements are needed, please refer to the point 4 on page 1.

*3: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

Pulse GL Series with 11th Gen. Intel Core Processor - 2/2

Notebook	Graphics	Video Output		External Display Output		3D BD Playback	NVIDIA Surround View* ³	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
Pulse GL76 11UEK	RTX 3060	-	1	HDMI* ¹ : 4096x2160 @60Hz	HDMI* ¹ : 1920x1080 @240Hz	X* ²	X	2
Pulse GL76 11UDK	RTX 3050Ti	-	1	HDMI* ¹ : 4096x2160 @60Hz	HDMI* ¹ : 1920x1080 @240Hz	X* ²	X	2
Pulse GL76 11UCK	RTX 3050	-	1	HDMI* ¹ : 4096x2160 @60Hz	HDMI* ¹ : 1920x1080 @240Hz	X* ²	X	2

*1: A native HDMI 2.0 with 4K resolution display supported monitor is necessary in order to achieve the 4K @60Hz display output.

*2: Additional requirements are needed, please refer to the point 4 on page 1.

*3: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

Crosshair Series with 11th Gen. Intel Core Processor - 1/1



Notebook	Graphics	Video Output		External Display Output		3D BD Playback	NVIDIA Surround View*3	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
Crosshair 15 A11UEK	RTX 3060	-	1	HDMI*1: 4096x2160 @60Hz	HDMI*1: 1920x1080 @240Hz	X*2	X	2
Crosshair 15 A11UDK	RTX 3050Ti	-	1	HDMI*1: 4096x2160 @60Hz	HDMI*1: 1920x1080 @240Hz	X*2	X	2
Crosshair 15 A11UCK	RTX 3050	-	1	HDMI*1: 4096x2160 @60Hz	HDMI*1: 1920x1080 @240Hz	X*2	X	2
Crosshair 17 A11UEK	RTX 3060	-	1	HDMI*1: 4096x2160 @60Hz	HDMI*1: 1920x1080 @240Hz	X*2	X	2
Crosshair 17 A11UDK	RTX 3050Ti	-	1	HDMI*1: 4096x2160 @60Hz	HDMI*1: 1920x1080 @240Hz	X*2	X	2
Crosshair 17 A11UCK	RTX 3050	-	1	HDMI*1: 4096x2160 @60Hz	HDMI*1: 1920x1080 @240Hz	X*2	X	2

*1: A native HDMI 2.0 with 4K resolution display supported monitor is necessary in order to achieve the 4K @60Hz display output.

*2: Additional requirements are needed, please refer to the point 4 on page 1.

*3: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

Katana GF Series with 11th Gen. Intel Core Processor - 1/1

Notebook	Graphics	Video Output		External Display Output		3D BD Playback	NVIDIA Surround View* ³	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
Katana GF66 11UG	RTX 3070	-	1	HDMI* ¹ : 4096x2160 @60Hz	HDMI* ¹ : 1920x1080 @240Hz	X* ²	X	2
Katana GF66 11UE	RTX 3060	-	1	HDMI* ¹ : 4096x2160 @60Hz	HDMI* ¹ : 1920x1080 @240Hz	X* ²	X	2
Katana GF66 11UD	RTX 3050 Ti	-	1	HDMI* ¹ : 4096x2160 @60Hz	HDMI* ¹ : 1920x1080 @240Hz	X* ²	X	2
Katana GF66 11UC	RTX 3050	-	1	HDMI* ¹ : 4096x2160 @60Hz	HDMI* ¹ : 1920x1080 @240Hz	X* ²	X	2
Katana GF76 11UEK	RTX 3060	-	1	HDMI* ¹ : 4096x2160 @60Hz	HDMI* ¹ : 1920x1080 @240Hz	X* ²	X	2
Katana GF76 11UE	RTX 3060	-	1	HDMI* ¹ : 4096x2160 @60Hz	HDMI* ¹ : 1920x1080 @240Hz	X* ²	X	2
Katana GF76 11UD	RTX 3050 Ti	-	1	HDMI* ¹ : 4096x2160 @60Hz	HDMI* ¹ : 1920x1080 @240Hz	X* ²	X	2
Katana GF76 11UC	RTX 3050	-	1	HDMI* ¹ : 4096x2160 @60Hz	HDMI* ¹ : 1920x1080 @240Hz	X* ²	X	2

*1: A native HDMI 2.0 with 4K resolution display supported monitor is necessary in order to achieve the 4K @60Hz display output.

*2: Additional requirements are needed, please refer to the point 4 on page 1.

*3: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

Sword Series with 11th Gen. Intel Core Processor - 1/1

Notebook	Graphics	Video Output		External Display Output		3D BD Playback	NVIDIA Surround View* ³	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
Sword 15 A11UG	RTX 3070	-	1	HDMI* ¹ : 4096x2160 @60Hz	HDMI* ¹ : 1920x1080 @240Hz	X* ²	X	2
Sword 15 A11UE	RTX 3060	-	1	HDMI* ¹ : 4096x2160 @60Hz	HDMI* ¹ : 1920x1080 @240Hz	X* ²	X	2
Sword 15 A11UD	RTX 3050Ti	-	1	HDMI* ¹ : 4096x2160 @60Hz	HDMI* ¹ : 1920x1080 @240Hz	X* ²	X	2
Sword 15 A11UC	RTX 3050	-	1	HDMI* ¹ : 4096x2160 @60Hz	HDMI* ¹ : 1920x1080 @240Hz	X* ²	X	2
Sword 17 A11UE	RTX 3060	-	1	HDMI* ¹ : 4096x2160 @60Hz	HDMI* ¹ : 1920x1080 @240Hz	X* ²	X	2
Sword 17 A11UD	RTX 3050Ti	-	1	HDMI* ¹ : 4096x2160 @60Hz	HDMI* ¹ : 1920x1080 @240Hz	X* ²	X	2
Sword 17 A11UC	RTX 3050	-	1	HDMI* ¹ : 4096x2160 @60Hz	HDMI* ¹ : 1920x1080 @240Hz	X* ²	X	2

*1: A native HDMI 2.0 with 4K resolution display supported monitor is necessary in order to achieve the 4K @60Hz display output.

*2: Additional requirements are needed, please refer to the point 4 on page 1.

*3: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GE Series with 10th Gen. Intel Core Processor - 1/5

Notebook	Graphics	Video Output			External Display Output		3D BD Playback	NVIDIA Surround View*4	Matrix Display (Incl. NB display)
		mDP	HDMI	Type-C DP*1	4Kx2K	120Hz			
GE76 Raider 10UE	RTX 3060	1 (v1.4)	1	1	HDMI*2: 4096x2160 @120Hz mDP: 5120x2160 @60Hz Type C-HDMI: 4096x2160 @120Hz Type C-DP: 5120x2160 @60Hz Type C-USB Type C (DP): 5120x2160 @60 Hz	HDMI*2: 1920x1080 @240Hz mDP: 1920x1080 @240Hz Type C-HDMI: 1920x1080 @240Hz Type C-DP: 1920x1080 @240Hz Type C-USB Type C (DP): 1920x1080 @240Hz	X*3	✓	4
GE76 Raider 10UG	RTX 3070	1 (v1.4)	1	1	HDMI*2: 4096x2160 @120Hz mDP: 5120x2160 @60Hz Type C-HDMI: 4096x2160 @120Hz Type C-DP: 5120x2160 @60Hz Type C-USB Type C (DP): 5120x2160 @60 Hz	HDMI*2: 1920x1080 @240Hz mDP: 1920x1080 @240Hz Type C-HDMI: 1920x1080 @240Hz Type C-DP: 1920x1080 @240Hz Type C-USB Type C (DP): 1920x1080 @240Hz	X*3	✓	4
GE76 Raider 10UH	RTX 3080	1 (v1.4)	1	1	HDMI*2: 4096x2160 @120Hz mDP: 5120x2160 @60Hz Type C-HDMI: 4096x2160 @120Hz Type C-DP: 5120x2160 @60Hz Type C-USB Type C (DP): 5120x2160 @60 Hz	HDMI*2: 1920x1080 @240Hz mDP: 1920x1080 @240Hz Type C-HDMI: 1920x1080 @240Hz Type C-DP: 1920x1080 @240Hz Type C-USB Type C (DP): 1920x1080 @240Hz	X*3	✓	4

*1: Type C USB port supports only data transmission and the display out, no Thunderbolt function.

*2: A native HDMI 2.0 with 4K resolution display supported monitor is necessary in order to achieve the 4K @60Hz display output.

*3: Additional requirements are needed, please refer to the point 4 on page 1.

*4: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GE Series with 10th Gen. Intel Core Processor - 2/5

Notebook	Graphics	Video Output			External Display Output		3D BD Playback	NVIDIA Surround View*4	Matrix Display (Incl. NB display)
		mDP	HDMI	Type-C DP*1	4Kx2K	120Hz			
GE76 Dragon Tiamat 10UG	RTX 3070	1 (v1.4)	1	1	HDMI*2: 4096x2160 @120Hz mDP: 5120x2160 @60Hz Type C-HDMI: 4096x2160 @120Hz Type C-DP: 5120x2160 @60Hz Type C-USB Type C (DP): 5120x2160 @60 Hz	HDMI*2: 1920x1080 @240Hz mDP: 1920x1080 @240Hz Type C-HDMI: 1920x1080 @240Hz Type C-DP: 1920x1080 @240Hz Type C-USB Type C (DP): 1920x1080 @240Hz	X*3	✓	4
GE76 Dragon Tiamat 10UH	RTX 3080	1 (v1.4)	1	1	HDMI*2: 4096x2160 @120Hz mDP: 5120x2160 @60Hz Type C-HDMI: 4096x2160 @120Hz Type C-DP: 5120x2160 @60Hz Type C-USB Type C (DP): 5120x2160 @60 Hz	HDMI*2: 1920x1080 @240Hz mDP: 1920x1080 @240Hz Type C-HDMI: 1920x1080 @240Hz Type C-DP: 1920x1080 @240Hz Type C-USB Type C (DP): 1920x1080 @240Hz	X*3	✓	4

*1: Type C USB port supports only data transmission and the display out, no Thunderbolt function.

*2: A native HDMI 2.0 with 4K resolution display supported monitor is necessary in order to achieve the 4K @60Hz display output.

*3: Additional requirements are needed, please refer to the point 4 on page 1.

*4: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GE Series with 10th Gen. Intel Core Processor - 3/5



Notebook	Graphics	Video Output			External Display Output		3D BD Playback	NVIDIA Surround View* ⁴	Matrix Display (Incl. NB display)
		mDP	HDMI	Type-C DP* ¹	4Kx2K	120Hz			
GE66 Raider 10UE	RTX 3060	1 (v1.4)	1	1	HDMI* ² : 4096x2160 @120Hz mDP: 5120x2160 @60Hz Type C-HDMI: 4096x2160 @60Hz Type C-DP: 5120x2160 @60Hz Type C-USB Type C (DP): 5120x2160 @60 Hz	HDMI* ² : 1920x1080 @240Hz mDP: 1920x1080 @240Hz Type C-HDMI: 1920x1080 @240Hz Type C-DP: 1920x1080 @240Hz Type C-USB Type C (DP): 1920x1080 @240Hz	X* ³	✓	4
GE66 Raider 10UG	RTX 3070	1 (v1.4)	1	1	HDMI* ² : 4096x2160 @120Hz mDP: 5120x2160 @60Hz Type C-HDMI: 4096x2160 @60Hz Type C-DP: 5120x2160 @60Hz Type C-USB Type C (DP): 5120x2160 @60 Hz	HDMI* ² : 1920x1080 @240Hz mDP: 1920x1080 @240Hz Type C-HDMI: 1920x1080 @240Hz Type C-DP: 1920x1080 @240Hz Type C-USB Type C (DP): 1920x1080 @240Hz	X* ³	✓	4
GE66 Raider 10UH	RTX 3080	1 (v1.4)	1	1	HDMI* ² : 4096x2160 @120Hz mDP: 5120x2160 @60Hz Type C-HDMI: 4096x2160 @60Hz Type C-DP: 5120x2160 @60Hz Type C-USB Type C (DP): 5120x2160 @60 Hz	HDMI* ² : 1920x1080 @240Hz mDP: 1920x1080 @240Hz Type C-HDMI: 1920x1080 @240Hz Type C-DP: 1920x1080 @240Hz Type C-USB Type C (DP): 1920x1080 @240Hz	X* ³	✓	4

*1: Type C USB port supports only data transmission and the display out, no Thunderbolt function.

*2: A native HDMI 2.0 with 4K resolution display supported monitor is necessary in order to achieve the 4K @60Hz display output.

*3: Additional requirements are needed, please refer to the point 4 on page 1.

*4: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GE Series with 10th Gen. Intel Core Processor - 4/5

Notebook	Graphics	Video Output			External Display Output		3D BD Playback	NVIDIA Surround View*4	Matrix Display (Incl. NB display)
		mDP	HDMI	Type-C DP*1	4Kx2K	120Hz			
GE66 Raider 10SF	RTX 2070	1 (v1.4)	1	1	HDMI*2: 4096x2160 @60Hz mDP: 5120x2160 @60Hz Type C-HDMI: 3840x2160 @30Hz Type C-DP: 5120x2160 @60Hz Type C-USB Type C (DP): 5120x2160 @60 Hz	HDMI*2: 1920x1080 @240Hz mDP: 2560x1440 @144Hz Type C-HDMI: 1920x1080 @120Hz Type C-DP: 1920x1080 @240Hz Type C-USB Type C (DP): 3440x1440 @100 Hz	X*3	✓	4
GE66 Raider 10SFS	RTX 2070 SUPER	1 (v1.4)	1	1	HDMI*2: 4096x2160 @60Hz mDP: 5120x2160 @60Hz Type C-HDMI: 3840x2160 @30Hz Type C-DP: 5120x2160 @60Hz Type C-USB Type C (DP): 5120x2160 @60 Hz	HDMI*2: 1920x1080 @240Hz mDP: 2560x1440 @144Hz Type C-HDMI: 1920x1080 @120Hz Type C-DP: 1920x1080 @240Hz Type C-USB Type C (DP): 3440x1440 @100 Hz	X*3	✓	4
GE66 Raider 10SGS	RTX 2080 SUPER	1 (v1.4)	1	1	HDMI*2: 4096x2160 @60Hz mDP: 5120x2160 @60Hz Type C-HDMI: 3840x2160 @30Hz Type C-DP: 5120x2160 @60Hz Type C-USB Type C (DP): 5120x2160 @60 Hz	HDMI*2: 1920x1080 @240Hz mDP: 2560x1440 @144Hz Type C-HDMI: 1920x1080 @120Hz Type C-DP: 1920x1080 @240Hz Type C-USB Type C (DP): 3440x1440 @100 Hz	X*3	✓	4

*1: Type C USB port supports only data transmission and the display out, no Thunderbolt function.

*2: A native HDMI 2.0 with 4K resolution display supported monitor is necessary in order to achieve the 4K @60Hz display output.

*3: Additional requirements are needed, please refer to the point 4 on page 1.

*4: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GE Series with 10th Gen. Intel Core Processor - 5/5



Notebook	Graphics	Video Output		External Display Output		3D BD Playback	NVIDIA Surround View*3	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
GE75 Raider 10SE	RTX 2060	1 (v1.2)	1	HDMI*1: 3840x2160 @60Hz mDP: 5120x2160 @60Hz	HDMI*1: 1920x1080 @120Hz mDP: 1920x1080 @240Hz	X*2	✓	3
GE75 Raider 10SF	RTX 2070	1 (v1.2)	1	HDMI*1: 3840x2160 @60Hz mDP: 5120x2160 @60Hz	HDMI*1: 1920x1080 @120Hz mDP: 1920x1080 @240Hz	X*2	✓	3
GE75 Raider 10SFS	RTX 2070 SUPER	1 (v1.2)	1	HDMI*1: 3840x2160 @60Hz mDP: 5120x2160 @60Hz	HDMI*1: 1920x1080 @120Hz mDP: 1920x1080 @240Hz	X*2	✓	3
GE75 Raider 10SGS	RTX 2080 SUPER	1 (v1.2)	1	HDMI*1: 3840x2160 @60Hz mDP: 5120x2160 @60Hz	HDMI*1: 1920x1080 @120Hz mDP: 1920x1080 @240Hz	X*2	✓	3

*1: A native HDMI 2.0 with 4K resolution display supported monitor is necessary in order to achieve the 4K @60Hz display output.

*2: Additional requirements are needed, please refer to the point 4 on page 1.

*3: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GE Series with 9th/8th Gen. Intel Core Processor - 1/4

Notebook	Graphics	Video Output		External Display Output		3D BD Playback	NVIDIA Surround View*3	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
GE75 Raider 9SG	RTX 2080	1 (v1.2)	1	HDMI*1: 4096x2160 @60Hz mDP: 3840x2160 @60Hz	HDMI*1: 1920x1080 @240Hz mDP: 2560x1440 @144Hz	X*2	✓	3
GE75 Raider 9SF	RTX 2070	1 (v1.2)	1	HDMI*1: 4096x2160 @60Hz mDP: 3840x2160 @60Hz	HDMI*1: 1920x1080 @240Hz mDP: 2560x1440 @144Hz	X*2	✓	3
GE75 Raider 9SE	RTX 2060	1 (v1.2)	1	HDMI*1: 4096x2160 @60Hz mDP: 3840x2160 @60Hz	HDMI*1: 1920x1080 @240Hz mDP: 2560x1440 @144Hz	X*2	✓	3
GE65 Raider 9SF	RTX 2080	1 (v1.2)	1	HDMI*1: 4096x2160 @60Hz mDP: 3840x2160 @60Hz	HDMI*1: 1920x1080 @240Hz mDP: 2560x1440 @144Hz	X*2	✓	3
GE65 Raider 9SE	RTX 2070	1 (v1.2)	1	HDMI*1: 4096x2160 @60Hz mDP: 3840x2160 @60Hz	HDMI*1: 1920x1080 @240Hz mDP: 2560x1440 @144Hz	X*2	✓	3

*1: A native HDMI 2.0 with 4K resolution display supported monitor is necessary in order to achieve the 4K @60Hz display output.

*2: Additional requirements are needed, please refer to the point 4 on page 1.

*3: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GE Series with 9th/8th Gen. Intel Core Processor - 2/4

Notebook	Graphics	Video Output		External Display Output		3D BD Playback	NVIDIA Surround View*3	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
GE63 Raider RGB 9SG	RTX 2080	1 (v1.2)	1	HDMI*1: 4096x2160 @60Hz mDP: 3840x2160 @60Hz	HDMI*1: 1920x1080 @60Hz mDP: 2560x1440 @144Hz	X*2	✓	3
GE63 Raider RGB 9SF	RTX 2070	1 (v1.2)	1	HDMI*1: 4096x2160 @60Hz mDP: 3840x2160 @60Hz	HDMI*1: 1920x1080 @60Hz mDP: 2560x1440 @144Hz	X*2	✓	3
GE63 Raider RGB 9SE	RTX 2060	1 (v1.2)	1	HDMI*1: 4096x2160 @60Hz mDP: 3840x2160 @60Hz	HDMI*1: 1920x1080 @60Hz mDP: 2560x1440 @144Hz	X*2	✓	3

*1: A native HDMI 2.0 with 4K resolution display supported monitor is necessary in order to achieve the 4K @60Hz display output.

*2: Additional requirements are needed, please refer to the point 4 on page 1.

*3: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GE Series with 9th/8th Gen. Intel Core Processor - 3/4

Notebook	Graphics	Video Output		External Display Output		3D BD Playback	NVIDIA Surround View*3	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
GE75 Raider 8SG	RTX2080	1 (v1.2)	1	HDMI*1: 4096x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X*2	✓	3
GE75 Raider 8SF	RTX2070	1 (v1.2)	1	HDMI*1: 4096x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X*2	✓	3
GE75 Raider 8SE	RTX2060	1 (v1.2)	1	HDMI*1: 4096x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X*2	✓	3
GE75 Raider 8RF	GTX 1070	1 (v1.2)	1	HDMI*1: 4096x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X*2	✓	3
GE75 Raider 8RE	GTX 1060	1 (v1.2)	1	HDMI*1: 4096x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X*2	✓	3

*1: A native HDMI 2.0 with 4K resolution display supported monitor is necessary in order to achieve the 4K @60Hz display output.

*2: Additional requirements are needed, please refer to the point 4 on page 1.

*3: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GE Series with 9th/8th Gen. Intel Core Processor - 4/4



Notebook	Graphics	Video Output		External Display Output		3D BD Playback	NVIDIA Surround View ^{*3}	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
GE63 Raider RGB 8SG	RTX2080	1 (v1.2)	1	HDMI ^{*1} : 4096x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X ^{*2}	✓	3
GE63 Raider RGB 8SF	RTX2070	1 (v1.2)	1	HDMI ^{*1} : 4096x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X ^{*2}	✓	3
GE63 Raider RGB 8SE	RTX2060	1 (v1.2)	1	HDMI ^{*1} : 4096x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X ^{*2}	✓	3
GE73 Raider RGB 8RF	GTX 1070	1 (v1.2)	1	HDMI ^{*1} : 4096x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X ^{*2}	✓	3
GE63 Raider RGB 8RF	GTX 1070	1 (v1.2)	1	HDMI ^{*1} : 4096x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X ^{*2}	✓	3
GE73 Raider RGB 8RE	GTX 1060	1 (v1.2)	1	HDMI ^{*1} : 4096x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X ^{*2}	✓	3
GE63 Raider RGB 8RE	GTX 1060	1 (v1.2)	1	HDMI ^{*1} : 4096x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X ^{*2}	✓	3

*1: A native HDMI 2.0 with 4K resolution display supported monitor is necessary in order to achieve the 4K @60Hz display output.

*2: Additional requirements are needed, please refer to the point 4 on page 1.

*3: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GP Series with 10th Gen. Intel Core Processor - 1/6



Notebook	Graphics	Video Output		External Display Output		3D BD Playback	NVIDIA Surround View* ⁴	Matrix Display (Incl. NB display)
		HDMI	Type-C Dp* ¹	4Kx2K	120Hz			
GP76 Leopard 10UE	RTX 3060	1	1	HDMI* ² : 4096x2160 @120Hz Type C-HDMI: 4096x2160 @120Hz Type C-DP: 5120x2160 @60Hz Type C-USB Type C (DP): 5120x2160 @60 Hz	HDMI* ² : 1920x1080 @240Hz Type C-HDMI: 1920x1080 @240Hz Type C-DP: 1920x1080 @240Hz Type C-USB Type C (DP): 1920x1080 @240Hz	X* ³	✓	4
GP76 Leopard 10UG	RTX 3070	1	1	HDMI* ² : 4096x2160 @120Hz Type C-HDMI: 4096x2160 @120Hz Type C-DP: 5120x2160 @60Hz Type C-USB Type C (DP): 5120x2160 @60 Hz	HDMI* ² : 1920x1080 @240Hz Type C-HDMI: 1920x1080 @240Hz Type C-DP: 1920x1080 @240Hz Type C-USB Type C (DP): 1920x1080 @240Hz	X* ³	✓	4
GP76 Leopard 10UH	RTX 3080	1	1	HDMI* ² : 4096x2160 @120Hz Type C-HDMI: 4096x2160 @120Hz Type C-DP: 5120x2160 @60Hz Type C-USB Type C (DP): 5120x2160 @60 Hz	HDMI* ² : 1920x1080 @240Hz Type C-HDMI: 1920x1080 @240Hz Type C-DP: 1920x1080 @240Hz Type C-USB Type C (DP): 1920x1080 @240Hz	X* ³	✓	4

*1: Type C USB port supports only data transmission and the display out, no Thunderbolt function.

*2: A native HDMI 2.0 with 4K resolution display supported monitor is necessary in order to achieve the 4K @60Hz display output.

*3: Additional requirements are needed, please refer to the point 4 on page 1.

*4: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GP Series with 10th Gen. Intel Core Processor - 2/6

Notebook	Graphics	Video Output		External Display Output		3D BD Playback	NVIDIA Surround View*4	Matrix Display (Incl. NB display)
		HDMI	Type-C DP*1	4Kx2K	120Hz			
GP66 Leopard 10UE	RTX 3060	1	1	HDMI*2: 4096x2160 @120Hz Type C-HDMI: 4096x2160 @60Hz Type C-DP: 5120x2160 @60Hz Type C-USB Type C (DP): 5120x2160 @60 Hz	HDMI*2: 1920x1080 @240Hz Type C-HDMI: 1920x1080 @240Hz Type C-DP: 1920x1080 @240Hz Type C-USB Type C (DP): 1920x1080 @240Hz	X*3	✓	4
GP66 Leopard 10UG	RTX 3070	1	1	HDMI*2: 4096x2160 @120Hz Type C-HDMI: 4096x2160 @60Hz Type C-DP: 5120x2160 @60Hz Type C-USB Type C (DP): 5120x2160 @60 Hz	HDMI*2: 1920x1080 @240Hz Type C-HDMI: 1920x1080 @240Hz Type C-DP: 1920x1080 @240Hz Type C-USB Type C (DP): 1920x1080 @240Hz	X*3	✓	4
GP66 Leopard 10UH	RTX 3080	1	1	HDMI*2: 4096x2160 @120Hz Type C-HDMI: 4096x2160 @60Hz Type C-DP: 5120x2160 @60Hz Type C-USB Type C (DP): 5120x2160 @60 Hz	HDMI*2: 1920x1080 @240Hz Type C-HDMI: 1920x1080 @240Hz Type C-DP: 1920x1080 @240Hz Type C-USB Type C (DP): 1920x1080 @240Hz	X*3	✓	4

*1: Type C USB port supports only data transmission and the display out, no Thunderbolt function.

*2: A native HDMI 2.0 with 4K resolution display supported monitor is necessary in order to achieve the 4K @60Hz display output.

*3: Additional requirements are needed, please refer to the point 4 on page 1.

*4: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GP Series with 10th Gen. Intel Core Processor - 3/6

Notebook	Graphics	Video Output		External Display Output		3D BD Playback	NVIDIA Surround View*3	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
GP65 Leopard 10SDK	RTX 1660Ti	1 (v1.2)	1	HDMI*1: 3840x2160 @60Hz mDP: 7680x4320 @30Hz	HDMI*1: 1920x1080 @120Hz mDP: 1920x1080 @240Hz	X*2	✓	3
GP65 Leopard 10SDR	RTX 1660Ti	1 (v1.2)	1	HDMI*1: 3840x2160 @60Hz mDP: 7680x4320 @30Hz	HDMI*1: 1920x1080 @120Hz mDP: 1920x1080 @240Hz	X*2	✓	3
GP65 Leopard 10SEK	RTX 2060	1 (v1.2)	1	HDMI*1: 3840x2160 @60Hz mDP: 7680x4320 @30Hz	HDMI*1: 1920x1080 @120Hz mDP: 1920x1080 @240Hz	X*2	✓	3
GP65 Leopard 10SER	RTX 2060	1 (v1.2)	1	HDMI*1: 3840x2160 @60Hz mDP: 7680x4320 @30Hz	HDMI*1: 1920x1080 @120Hz mDP: 1920x1080 @240Hz	X*2	✓	3
GP65 Leopard 10SFK	RTX 2070	1 (v1.2)	1	HDMI*1: 3840x2160 @60Hz mDP: 7680x4320 @30Hz	HDMI*1: 1920x1080 @120Hz mDP: 1920x1080 @240Hz	X*2	✓	3
GP65 Leopard 10SFR	RTX 2070	1 (v1.2)	1	HDMI*1: 3840x2160 @60Hz mDP: 7680x4320 @30Hz	HDMI*1: 1920x1080 @120Hz mDP: 1920x1080 @240Hz	X*2	✓	3
GP65 Leopard 10SFSK	RTX 2070 SUPER	1 (v1.2)	1	HDMI*1: 3840x2160 @60Hz mDP: 7680x4320 @30Hz	HDMI*1: 1920x1080 @120Hz mDP: 1920x1080 @240Hz	X*2	✓	3
GP65 Leopard 10SFSR	RTX 2070 SUPER	1 (v1.2)	1	HDMI*1: 3840x2160 @60Hz mDP: 7680x4320 @30Hz	HDMI*1: 1920x1080 @120Hz mDP: 1920x1080 @240Hz	X*2	✓	3

*1: A native HDMI 2.0 with 4K resolution display supported monitor is necessary in order to achieve the 4K @60Hz display output.

*2: Additional requirements are needed, please refer to the point 4 on page 1.

*3: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GP Series with 10th Gen. Intel Core Processor - 4/6

Notebook	Graphics	Video Output		External Display Output		3D BD Playback	NVIDIA Surround View*3	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
GP65 Leopard 10SCSK	GTX 1650Ti	1 (v1.2)	1	HDMI*1: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	HDMI*1: 1920x1080 @120Hz mDP: 1920x1080 @240Hz	X*2	X	3
GP65 Leopard 10SCSR	GTX 1650Ti	1 (v1.2)	1	HDMI*1: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	HDMI*1: 1920x1080 @120Hz mDP: 1920x1080 @240Hz	X*2	X	3
GP65 Leopard 10SCXK	GTX 1650Ti	1 (v1.2)	1	HDMI*1: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	HDMI*1: 1920x1080 @120Hz mDP: 1920x1080 @240Hz	X*2	X	3
GP65 Leopard 10SCXR	GTX 1650Ti	1 (v1.2)	1	HDMI*1: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	HDMI*1: 1920x1080 @120Hz mDP: 1920x1080 @240Hz	X*2	X	3

*1: A native HDMI 2.0 with 4K resolution display supported monitor is necessary in order to achieve the 4K @60Hz display output.

*2: Additional requirements are needed, please refer to the point 4 on page 1.

*3: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GP Series with 10th Gen. Intel Core Processor - 5/6

Notebook	Graphics	Video Output		External Display Output		3D BD Playback	NVIDIA Surround View ^{*3}	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
GP75 Leopard 10SDK	GTX 1660Ti	1 (v1.2)	1	HDMI*1: 3840x2160 @60Hz mDP: 7680x4320 @30Hz	HDMI*1: 1920x1080 @120Hz mDP: 1920x1080 @240Hz	X*2	✓	3
GP75 Leopard 10SDR	GTX 1660Ti	1 (v1.2)	1	HDMI*1: 3840x2160 @60Hz mDP: 7680x4320 @30Hz	HDMI*1: 1920x1080 @120Hz mDP: 1920x1080 @240Hz	X*2	✓	3
GP75 Leopard 10SEK	RTX 2060	1 (v1.2)	1	HDMI*1: 3840x2160 @60Hz mDP: 7680x4320 @30Hz	HDMI*1: 1920x1080 @120Hz mDP: 1920x1080 @240Hz	X*2	✓	3
GP75 Leopard 10SER	RTX 2060	1 (v1.2)	1	HDMI*1: 3840x2160 @60Hz mDP: 7680x4320 @30Hz	HDMI*1: 1920x1080 @120Hz mDP: 1920x1080 @240Hz	X*2	✓	3
GP75 Leopard 10SFK	RTX 2070	1 (v1.2)	1	HDMI*1: 3840x2160 @60Hz mDP: 7680x4320 @30Hz	HDMI*1: 1920x1080 @120Hz mDP: 1920x1080 @240Hz	X*2	✓	3
GP75 Leopard 10SFR	RTX 2070	1 (v1.2)	1	HDMI*1: 3840x2160 @60Hz mDP: 7680x4320 @30Hz	HDMI*1: 1920x1080 @120Hz mDP: 1920x1080 @240Hz	X*2	✓	3
GP75 Leopard 10SFSK	RTX 2070 SUPER	1 (v1.2)	1	HDMI*1: 3840x2160 @60Hz mDP: 7680x4320 @30Hz	HDMI*1: 1920x1080 @120Hz mDP: 1920x1080 @240Hz	X*2	✓	3
GP75 Leopard 10SFSR	RTX 2070 SUPER	1 (v1.2)	1	HDMI*1: 3840x2160 @60Hz mDP: 7680x4320 @30Hz	HDMI*1: 1920x1080 @120Hz mDP: 1920x1080 @240Hz	X*2	✓	3

*1: A native HDMI 2.0 with 4K resolution display supported monitor is necessary in order to achieve the 4K @60Hz display output.

*2: Additional requirements are needed, please refer to the point 4 on page 1.

*3: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GP Series with 10th Gen. Intel Core Processor - 6/6

Notebook	Graphics	Video Output		External Display Output		3D BD Playback	NVIDIA Surround View*3	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
GP75 Leopard 10SCSK	GTX 1650Ti	1 (v1.2)	1	HDMI*1: 3840x2160 @30Hz mDP: 384x2160 @60Hz	HDMI*1: 1920x1080 @120Hz mDP: 1920x1080 @240Hz	X*2	X	3
GP75 Leopard 10SCSR	GTX 1650Ti	1 (v1.2)	1	HDMI*1: 3840x2160 @30Hz mDP: 384x2160 @60Hz	HDMI*1: 1920x1080 @120Hz mDP: 1920x1080 @240Hz	X*2	X	3
GP75 Leopard 10SCXK	GTX 1650	1 (v1.2)	1	HDMI*1: 3840x2160 @30Hz mDP: 384x2160 @60Hz	HDMI*1: 1920x1080 @120Hz mDP: 1920x1080 @240Hz	X*2	X	3
GP75 Leopard 10SCXR	GTX 1650	1 (v1.2)	1	HDMI*1: 3840x2160 @30Hz mDP: 384x2160 @60Hz	HDMI*1: 1920x1080 @120Hz mDP: 1920x1080 @240Hz	X*2	X	3

*1: A native HDMI 2.0 with 4K resolution display supported monitor is necessary in order to achieve the 4K @60Hz display output.

*2: Additional requirements are needed, please refer to the point 4 on page 1.

*3: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GP Series with 9th/8th Gen. Intel Core Processor - 1/2



Notebook	Graphics	Video Output		External Display Output		3D BD Playback	NVIDIA Surround View*3	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
GP75 Leopard 9SF	RTX 2070	1 (v1.2)	1	HDMI*1: 4096x2160 @60Hz mDP: 3840x2160 @60Hz	HDMI*1: 1920x1080 @240Hz mDP: 2560x1440 @144Hz	X*2	✓	3
GP75 Leopard 9SE	RTX 2060	1 (v1.2)	1	HDMI*1: 4096x2160 @60Hz mDP: 3840x2160 @60Hz	HDMI*1: 1920x1080 @240Hz mDP: 2560x1440 @144Hz	X*2	✓	3
GP75 Leopard 9SD	GTX 1660	1 (v1.2)	1	HDMI*1: 4096x2160 @60Hz mDP: 3840x2160 @60Hz	HDMI*1: 1920x1080 @240Hz mDP: 2560x1440 @144Hz	X*2	✓	3
GP65 Leopard 9SE	RTX 2060	1 (v1.2)	1	HDMI*1: 4096x2160 @60Hz mDP: 3840x2160 @60Hz	HDMI*1: 1920x1080 @240Hz mDP: 2560x1440 @144Hz	X*2	✓	3
GP65 Leopard 9SD	GTX 1660	1 (v1.2)	1	HDMI*1: 4096x2160 @60Hz mDP: 3840x2160 @60Hz	HDMI*1: 1920x1080 @240Hz mDP: 2560x1440 @144Hz	X*2	✓	3

*1: A native HDMI 2.0 with 4K resolution display supported monitor is necessary in order to achieve the 4K @60Hz display output.

*2: Additional requirements are needed, please refer to the point 4 on page 1.

*3: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GP Series with 9th/8th Gen. Intel Core Processor - 2/2

Notebook	Graphics	Video Output		External Display Output		3D BD Playback	NVIDIA Surround View*3	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
GP73 Leopard 8RE	GTX 1060	1 (v1.2)	1	HDMI*1: 4096x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @60Hz	X*2	✓	3
GP63 Leopard 8RE	GTX 1060	1 (v1.2)	1	HDMI*1: 4096x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @60Hz	X*2	✓	3
GP73 Leopard 8RD	GTX 1050Ti	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @60Hz	X*2	X	3
GP63 Leopard 8RD	GTX 1050Ti	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @60Hz	X*2	X	3

*1: A native HDMI 2.0 with 4K resolution display supported monitor is necessary in order to achieve the 4K @60Hz display output.

*2: Additional requirements are needed, please refer to the point 4 on page 1.

*3: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GL Series with 10th Gen. Intel Core Processor - 1/4

Notebook	Graphics	Video Output		External Display Output		3D BD Playback	NVIDIA Surround View ^{*2}	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
GL65 Leopard 10SDK	GTX 1660Ti	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 7680x4320 @30Hz	mDP: 1920x1080 @240Hz HDMI: 1920x1080 @120Hz	X ^{*1}	✓	3
GL65 Leopard 10SDR	GTX 1660Ti	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 7680x4320 @30Hz	mDP: 1920x1080 @240Hz HDMI: 1920x1080 @120Hz	X ^{*1}	✓	3
GL65 Leopard 10SEK	GTX 1650Ti	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 7680x4320 @30Hz	mDP: 1920x1080 @240Hz HDMI: 1920x1080 @120Hz	X ^{*1}	✓	3
GL65 Leopard 10SER	GTX 1650Ti	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 7680x4320 @30Hz	mDP: 1920x1080 @240Hz HDMI: 1920x1080 @120Hz	X ^{*1}	✓	3
GL65 Leopard 10SFK	GTX 1650Ti	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 7680x4320 @30Hz	mDP: 1920x1080 @240Hz HDMI: 1920x1080 @120Hz	X ^{*1}	✓	3
GL65 Leopard 10SFR	GTX 1650Ti	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 7680x4320 @30Hz	mDP: 1920x1080 @240Hz HDMI: 1920x1080 @120Hz	X ^{*1}	✓	3

*1: Additional requirements are needed, please refer to the point 4 on page 1.

*2: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GL Series with 10th Gen. Intel Core Processor - 2/4

Notebook	Graphics	Video Output		External Display Output		3D BD Playback	NVIDIA Surround View ^{*2}	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
GL65 Leopard 10SCSK	GTX 1650Ti	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 1920x1080 @240Hz HDMI: 1920x1080 @120Hz	X ^{*1}	X	3
GL65 Leopard 10SCSR	GTX 1650Ti	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 1920x1080 @240Hz HDMI: 1920x1080 @120Hz	X ^{*1}	X	3
GL65 Leopard 10SCXK	GTX 1650	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 1920x1080 @240Hz HDMI: 1920x1080 @120Hz	X ^{*1}	X	3
GL65 Leopard 10SCXR	GTX 1650	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 1920x1080 @240Hz HDMI: 1920x1080 @120Hz	X ^{*1}	X	3

*1: Additional requirements are needed, please refer to the point 4 on page 1.

*2: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GL Series with 10th Gen. Intel Core Processor - 3/4

Notebook	Graphics	Video Output		External Display Output		3D BD Playback	NVIDIA Surround View ^{*2}	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
GL75 Leopard 10SDK	GTX 1660Ti	1 (v1.2)	1	HDMI: 3840x2160 @60Hz mDP: 7680x4320 @30Hz	mDP: 1920x1080 @240Hz HDMI: 1920x1080 @120Hz	X ^{*1}	✓	3
GL75 Leopard 10SDR	GTX 1660Ti	1 (v1.2)	1	HDMI: 3840x2160 @60Hz mDP: 7680x4320 @30Hz	mDP: 1920x1080 @240Hz HDMI: 1920x1080 @120Hz	X ^{*1}	✓	3
GL75 Leopard 10SEK	GTX 2060	1 (v1.2)	1	HDMI: 3840x2160 @60Hz mDP: 7680x4320 @30Hz	mDP: 1920x1080 @240Hz HDMI: 1920x1080 @120Hz	X ^{*1}	✓	3
GL75 Leopard 10SER	GTX 2060	1 (v1.2)	1	HDMI: 3840x2160 @60Hz mDP: 7680x4320 @30Hz	mDP: 1920x1080 @240Hz HDMI: 1920x1080 @120Hz	X ^{*1}	✓	3
GL75 Leopard 10SFK	GTX 2070	1 (v1.2)	1	HDMI: 3840x2160 @60Hz mDP: 7680x4320 @30Hz	mDP: 1920x1080 @240Hz HDMI: 1920x1080 @120Hz	X ^{*1}	✓	3
GL75 Leopard 10SFR	GTX 2070	1 (v1.2)	1	HDMI: 3840x2160 @60Hz mDP: 7680x4320 @30Hz	mDP: 1920x1080 @240Hz HDMI: 1920x1080 @120Hz	X ^{*1}	✓	3

*1: Additional requirements are needed, please refer to the point 4 on page 1.

*2: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GL Series with 10th Gen. Intel Core Processor - 4/4

Notebook	Graphics	Video Output		External Display Output		3D BD Playback	NVIDIA Surround View*2	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
GL75 Leopard 10SCSK	GTX 1650Ti	1 (v1.2)	1	HDMI*1: 3840x2160 @30Hz mDP: 384x2160 @60Hz	HDMI*1: 1920x1080 @120Hz mDP: 1920x1080 @240Hz	X*1	X	3
GL75 Leopard 10SCSR	GTX 1650Ti	1 (v1.2)	1	HDMI*1: 3840x2160 @30Hz mDP: 384x2160 @60Hz	HDMI*1: 1920x1080 @120Hz mDP: 1920x1080 @240Hz	X*1	X	3
GL75 Leopard 10SCXK	GTX 1650	1 (v1.2)	1	HDMI*1: 3840x2160 @30Hz mDP: 384x2160 @60Hz	HDMI*1: 1920x1080 @120Hz mDP: 1920x1080 @240Hz	X*1	X	3
GL75 Leopard 10SCXR	GTX 1650	1 (v1.2)	1	HDMI*1: 3840x2160 @30Hz mDP: 384x2160 @60Hz	HDMI*1: 1920x1080 @120Hz mDP: 1920x1080 @240Hz	X*1	X	3

*1: Additional requirements are needed, please refer to the point 4 on page 1.

*2: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GL Series with 9th/8th Gen. Intel Core Processor - 1/7

Notebook	Graphics	Video Output		External Display Output		3D BD Playback	NVIDIA Surround View*2	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
GL75 9SEK	RTX 2060	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X*1	✓	3
GL75 9SE	RTX 2060	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X*1	✓	3
GL75 9SDK	GTX 1660	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X*1	✓	3
GL75 9SD	GTX 1660	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X*1	✓	3
GL75 9SCK	GTX 1650	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X*1	X	3
GL75 9SC	GTX 1650	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X*1	X	3

*1: Additional requirements are needed, please refer to the point 4 on page 1.

*2: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GL Series with 9th/8th Gen. Intel Core Processor - 2/7



Notebook	Graphics	Video Output		External Display Output		3D BD Playback	NVIDIA Surround View*2	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
GL65 9SFK	RTX 2070	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X*1	✓	3
GL65 9SEK	RTX 2060	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X*1	✓	3
GL65 9SE	RTX 2060	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X*1	✓	3
GL65 9SDK	GTX 1660Ti	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X*1	✓	3
GL65 9SD	GTX 1660Ti	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X*1	✓	3
GL65 9SCK	GTX 1650	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X*1	X	3
GL65 9SC	GTX 1650	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X*1	X	3

*1: Additional requirements are needed, please refer to the point 4 on page 1.

*2: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GL Series with 9th/8th Gen. Intel Core Processor - 3/7

Notebook	Graphics	Video Output		External Display Output		3D BD Playback	NVIDIA Surround View*3	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
GL73 9SEK	RTX 2060	1 (v1.2)	1	HDMI*1: 4096x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @240Hz	X*2	✓	3
GL73 9SE	RTX 2060	1 (v1.2)	1	HDMI*1: 4096x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @240Hz	X*2	✓	3
GL73 9SDK	GTX 1660Ti	1 (v1.2)	1	HDMI*1: 4096x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @240Hz	X*2	✓	3
GL73 9SD	GTX 1660Ti	1 (v1.2)	1	HDMI*1: 4096x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @240Hz	X*2	✓	3
GL73 9SC	GTX 1650	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X*2	X	3

*1: A native HDMI 2.0 with 4K resolution display supported monitor is necessary in order to achieve the 4K @60Hz display output.

*2: Additional requirements are needed, please refer to the point 4 on page 1.

*3: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GL Series with 9th/8th Gen. Intel Core Processor - 4/7

Notebook	Graphics	Video Output		External Display Output		3D BD Playback	NVIDIA Surround View*3	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
GL63 9SEK	RTX 2060	1 (v1.2)	1	HDMI*1: 4096x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @240Hz	X*2	✓	3
GL63 9SE	RTX 2060	1 (v1.2)	1	HDMI*1: 4096x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @240Hz	X*2	✓	3
GL63 9SDK	GTX 1660Ti	1 (v1.2)	1	HDMI*1: 4096x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @240Hz	X*2	✓	3
GL63 9SD	GTX 1660Ti	1 (v1.2)	1	HDMI*1: 4096x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @240Hz	X*2	✓	3
GL63 9SC	GTX 1650	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X*2	X	3
GL63 9SFK	GTX 1660Ti	1 (v1.2)	1	HDMI*1: 4096x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @240Hz	X*2	✓	3

*1: A native HDMI 2.0 with 4K resolution display supported monitor is necessary in order to achieve the 4K @60Hz display output.

*2: Additional requirements are needed, please refer to the point 4 on page 1.

*3: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GL Series with 9th/8th Gen. Intel Core Processor - 5/7

Notebook	Graphics	Video Output		External Display Output		3D BD Playback	NVIDIA Surround View*3	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
GL63 9RDS	GTX 1050	1 (v1.2)	1	HDMI*1: 4096x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X*2	✓	3
GL73 9RC	GTX 1050	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X*2	X	3
GL63 9RC	GTX 1050	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X*2	X	3
GL63 9RCX	GTX 1050	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X*2	X	3

*1: A native HDMI 2.0 with 4K resolution display supported monitor is necessary in order to achieve the 4K @60Hz display output.

*2: Additional requirements are needed, please refer to the point 4 on page 1.

*3: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GL Series with 9th/8th Gen. Intel Core Processor - 6/7



Notebook	Graphics	Video Output		External Display Output		3D BD Playback	NVIDIA Surround View ^{*3}	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
GL73 8SEK	RTX 2060	1 (v1.2)	1	HDMI ^{*1} : 4096x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @240Hz	X ^{*2}	✓	3
GL63 8SEK	RTX 2060	1 (v1.2)	1	HDMI ^{*1} : 4096x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @240Hz	X ^{*2}	✓	3
GL73 8SE	RTX 2060	1 (v1.2)	1	HDMI ^{*1} : 4096x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @240Hz	X ^{*2}	✓	3
GL63 8SE	RTX 2060	1 (v1.2)	1	HDMI ^{*1} : 4096x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @240Hz	X ^{*2}	✓	3
GL73 8SDK	GTX 1660	1 (v1.2)	1	HDMI ^{*1} : 4096x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @240Hz	X ^{*2}	✓	3
GL63 8SDK	GTX 1660	1 (v1.2)	1	HDMI ^{*1} : 4096x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @240Hz	X ^{*2}	✓	3
GL73 8SD	GTX 1660	1 (v1.2)	1	HDMI ^{*1} : 4096x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @240Hz	X ^{*2}	✓	3
GL63 8SD	GTX 1660	1 (v1.2)	1	HDMI ^{*1} : 4096x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @240Hz	X ^{*2}	✓	3
GL73 8SC	GTX 1650	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @240Hz	X ^{*2}	X	3
GL63 8SC	GTX 1650	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @240Hz	X ^{*2}	X	3

*1: A native HDMI 2.0 with 4K resolution display supported monitor is necessary in order to achieve the 4K @60Hz display output.

*2: Additional requirements are needed, please refer to the point 4 on page 1.

*3: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GL Series with 9th/8th Gen. Intel Core Processor - 7/7

Notebook	Graphics	Video Output		External Display Output		3D BD Playback	NVIDIA Surround View ^{*2}	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
GL73 8RCS	GTX 1050	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @60Hz	X ^{*1}	X	3
GL63 8RCS	GTX 1050	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @60Hz	X ^{*1}	X	3
GL73 8RD	GTX 1050Ti	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @60Hz	X ^{*1}	X	3
GL63 8RD	GTX 1050Ti	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @60Hz	X ^{*1}	X	3
GL73 8RC	GTX 1050	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @60Hz	X ^{*1}	X	3
GL63 8RC	GTX 1050	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @60Hz	X ^{*1}	X	3
GL63 8RE	GTX 1060	1 (v1.2)	1	HDMI: 4096x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @60Hz	X ^{*1}	X	3

*1: Additional requirements are needed, please refer to the point 4 on page 1.

*2: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GF Series with 10th Gen. Intel Core Processor - 1/5

Notebook	Graphics	Video Output		External Display Output		3D BD Playback* ¹	NVIDIA Surround View* ²	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
GF63 Thin 10SCS	GTX 1650 Ti Max-Q	N/A	1	HDMI: 3840x2160 @30Hz	HDMI: 1920x1080 @120Hz	X* ¹	X	2
GF63 Thin 10SCSR	GTX 1650 Ti Max-Q	N/A	1	HDMI: 3840x2160 @30Hz	HDMI: 1920x1080 @120Hz	X* ¹	X	2
GF63 Thin 10SCX	GTX 1650 Max-Q	N/A	1	HDMI: 3840x2160 @30Hz	HDMI: 1920x1080 @120Hz	X* ¹	X	2
GF63 Thin 10SCXR	GTX 1650 Max-Q	N/A	1	HDMI: 3840x2160 @30Hz	HDMI: 1920x1080 @120Hz	X* ¹	X	2
GF63 Thin 10SC	GTX 1650 Max-Q	N/A	1	HDMI: 4096x2160 @30Hz	HDMI: 1920x1080 @120Hz	X* ¹	X	2
GF63 Thin 10UC	RTX 3050	N/A	1	HDMI: 4096x2160 @30Hz	HDMI: 1920x1080 @120Hz	X* ¹	X	2
GF63 Thin 10UD	RTX 3050 Ti	N/A	1	HDMI: 4096x2160 @30Hz	HDMI: 1920x1080 @120Hz	X* ¹	X	2

*1: Additional requirements are needed, please refer to the point 4 on page 1.

*2: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GF Series with 10th Gen. Intel Core Processor - 2/5

Notebook	Graphics	Video Output		External Display Output		3D BD Playback* ¹	NVIDIA Surround View* ²	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
GF65 Thin 10SD	GTX 1660Ti	N/A	1	HDMI: 3840x2160 @60Hz	HDMI: 1920x1080 @120Hz	X* ¹	X	2
GF65 Thin 10SDR	GTX 1660Ti	N/A	1	HDMI: 3840x2160 @60Hz	HDMI: 1920x1080 @120Hz	X* ¹	X	2
GF65 Thin 10SE	RTX 2060	N/A	1	HDMI: 3840x2160 @60Hz	HDMI: 1920x1080 @120Hz	X* ¹	X	2
GF65 Thin 10SER	RTX 2060	N/A	1	HDMI: 3840x2160 @60Hz	HDMI: 1920x1080 @120Hz	X* ¹	X	2
GF65 Thin 10UE	RTX 3060	N/A	1	HDMI: 4096x2160 @60Hz	HDMI: 1920x1080 @240Hz	X* ¹	X	2

*1: Additional requirements are needed, please refer to the point 4 on page 1.

*2: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GF Series with 10th Gen. Intel Core Processor - 3/5

Notebook	Graphics	Video Output		External Display Output		3D BD Playback ^{*1}	NVIDIA Surround View ^{*2}	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
GF75 Thin 10SC	GTX 1650	N/A	1	HDMI: 4096x2160@60Hz	HDMI: 1920x1080 @120Hz	X ^{*1}	X	2
GF75 Thin 10SCK	GTX 1650	N/A	1	HDMI: 4096x2160@60Hz	HDMI: 1920x1080 @120Hz	X ^{*1}	X	2
GF75 Thin 10UC	RTX 3050	N/A	1	HDMI: 4096x2160@60Hz	HDMI: 1920x1080 @120Hz	X ^{*1}	X	2
GF75 Thin 10UCK	RTX 3050	N/A	1	HDMI: 4096x2160@60Hz	HDMI: 1920x1080 @120Hz	X ^{*1}	X	2
GF75 Thin 10UD	RTX 3050 Ti	N/A	1	HDMI: 4096x2160@60Hz	HDMI: 1920x1080 @120Hz	X ^{*1}	X	2
GF75 Thin 10UDK	RTX 3050 Ti	N/A	1	HDMI: 4096x2160@60Hz	HDMI: 1920x1080 @120Hz	X ^{*1}	X	2
GF75 Thin 10UE	RTX 3060	N/A	1	HDMI: 4096x2160@60Hz	HDMI: 1920x1080 @240Hz	X ^{*1}	X	2
GF75 Thin 10UEK	RTX 3060	N/A	1	HDMI: 4096x2160@60Hz	HDMI: 1920x1080 @240Hz	X ^{*1}	X	2

*1: Additional requirements are needed, please refer to the point 4 on page 1.

*2: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GF Series with 10th Gen. Intel Core Processor - 4/5

Notebook	Graphics	Video Output		External Display Output		3D BD Playback* ¹	NVIDIA Surround View* ²	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
GF75 Thin 10SD	GTX 1660Ti	N/A	1	HDMI: 3840x2160 @60Hz	HDMI: 3840x2160 @60Hz	X* ¹	X	2
GF75 Thin 10SDK	GTX 1660Ti	N/A	1	HDMI: 3840x2160 @60Hz	HDMI: 3840x2160 @60Hz	X* ¹	X	2
GF75 Thin 10SDR	GTX 1660Ti	N/A	1	HDMI: 3840x2160 @60Hz	HDMI: 3840x2160 @60Hz	X* ¹	X	2
GF75 Thin 10SE	RTX 2060	N/A	1	HDMI: 3840x2160 @60Hz	HDMI: 3840x2160 @60Hz	X* ¹	X	2
GF75 Thin 10SEK	RTX 2060	N/A	1	HDMI: 3840x2160 @60Hz	HDMI: 3840x2160 @60Hz	X* ¹	X	2
GF75 Thin 10SER	RTX 2060	N/A	1	HDMI: 3840x2160 @60Hz	HDMI: 3840x2160 @60Hz	X* ¹	X	2

*1: Additional requirements are needed, please refer to the point 4 on page 1.

*2: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GF Series with 10th Gen. Intel Core Processor - 5/5



Notebook	Graphics	Video Output		External Display Output		3D BD Playback* ¹	NVIDIA Surround View* ²	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
GF75 Thin 10SCS	GTX 1650Ti	N/A	1	HDMI: 3840x2160 @30Hz	HDMI: 1920x1080 @120Hz	X* ¹	X	2
GF75 Thin 10SCSK	GTX 1650Ti	N/A	1	HDMI: 3840x2160 @30Hz	HDMI: 1920x1080 @120Hz	X* ¹	X	2
GF75 Thin 10SCSR	GTX 1650Ti	N/A	1	HDMI: 3840x2160 @30Hz	HDMI: 1920x1080 @120Hz	X* ¹	X	2
GF75 Thin 10SCX	GTX 1650	N/A	1	HDMI: 3840x2160 @30Hz	HDMI: 1920x1080 @120Hz	X* ¹	X	2
GF75 Thin 10SCXK	GTX 1650	N/A	1	HDMI: 3840x2160 @30Hz	HDMI: 1920x1080 @120Hz	X* ¹	X	2
GF75 Thin 10SCXR	GTX 1650	N/A	1	HDMI: 3840x2160 @30Hz	HDMI: 1920x1080 @120Hz	X* ¹	X	2

*1: Additional requirements are needed, please refer to the point 4 on page 1.

*2: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GF Series with 9th Gen. Intel Core Processor - 1/3

Notebook	Graphics	Video Output		External Display Output		3D BD Playback* ¹	NVIDIA Surround View* ²	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
GF75 Thin 9SCS	GTX 1650Ti	N/A	1	HDMI: 3840x2160 @30Hz	HDMI: 1920x1080 @120Hz	X* ¹	X	2
GF75 Thin 9SCSK	GTX 1650Ti	N/A	1	HDMI: 3840x2160 @30Hz	HDMI: 1920x1080 @120Hz	X* ¹	X	2
GF75 Thin 9SCSR	GTX 1650Ti	N/A	1	HDMI: 3840x2160 @30Hz	HDMI: 1920x1080 @120Hz	X* ¹	X	2
GF75 Thin 9SCX	GTX 1650	N/A	1	HDMI: 3840x2160 @30Hz	HDMI: 1920x1080 @120Hz	X* ¹	X	2
GF75 Thin 9SCXK	GTX 1650	N/A	1	HDMI: 3840x2160 @30Hz	HDMI: 1920x1080 @120Hz	X* ¹	X	2
GF75 Thin 9SCXR	GTX 1650	N/A	1	HDMI: 3840x2160 @30Hz	HDMI: 1920x1080 @120Hz	X* ¹	X	2

*1: Additional requirements are needed, please refer to the point 4 on page 1.

*2: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GF Series with 9th Gen. Intel Core Processor - 2/3

Notebook	Graphics	Video Output		External Display Output		3D BD Playback* ¹	NVIDIA Surround View* ²	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
GF75 THIN 9SE	RTX 2060	N/A	1	HDMI: 3840x2160 @30Hz	HDMI: 1920x1080 @60Hz	X* ¹	X	2
GF75 Thin 9SD	GTX 1660 Ti	N/A	1	HDMI: 3840x2160 @30Hz	HDMI: 1920x1080 @60Hz	X* ¹	X	2
GF75 THIN 9SC	GTX 1650	N/A	1	HDMI: 3840x2160 @30Hz	HDMI: 1920x1080 @60Hz	X* ¹	X	2
GF75 Thin 9RC	GTX 1050	N/A	1	HDMI: 3840x2160 @30Hz	HDMI: 1920x1080 @60Hz	X* ¹	X	2
GF65 Thin 9SEXR	RTX 2060	N/A	1	HDMI: 3840x2160 @30Hz	HDMI: 1920x1080 @60Hz	X* ¹	X	2

*1: Additional requirements are needed, please refer to the point 4 on page 1.

*2: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GF Series with 9th Gen. Intel Core Processor - 3/3

Notebook	Graphics	Video Output		External Display Output		3D BD Playback* ¹	NVIDIA Surround View* ²	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
GF65 THIN 9SE	RTX 2060	N/A	1	HDMI: 3840x2160 @30Hz	HDMI: 1920x1080 @60Hz	X* ¹	X	2
GF65 THIN 9SD	GTX 1660 Ti	N/A	1	HDMI: 3840x2160 @30Hz	HDMI: 1920x1080 @60Hz	X* ¹	X	2
GF63 Thin 9SC	GTX 1650 Max-Q	N/A	1	HDMI: 3840x2160 @30Hz	HDMI: 1920x1080 @60Hz	X* ¹	X	2
GF63 Thin 9RCX	GTX 1050 Ti Max-Q	N/A	1	HDMI: 3840x2160 @30Hz	HDMI: 1920x1080 @60Hz	X* ¹	X	2
GF63 Thin 9RC	GTX 1050	N/A	1	HDMI: 3840x2160 @30Hz	HDMI: 1920x1080 @60Hz	X* ¹	X	2

*1: Additional requirements are needed, please refer to the point 4 on page 1.

*2: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GF Series with 8th Gen. Intel Core Processor - 1/2

Notebook	Graphics	Video Output		External Display Output		3D BD Playback* ¹	NVIDIA Surround View* ²	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
GF75 Thin 8RD	GTX 1050Ti	N/A	1	HDMI: 3840x2160 @30Hz	HDMI: 1920x1080 @60Hz	X* ¹	X	2
GF75 Thin 8RCS	GTX 1050	N/A	1	HDMI: 3840x2160 @30Hz	HDMI: 1920x1080 @60Hz	X* ¹	X	2
GF75 Thin 8RC	GTX 1050	N/A	1	HDMI: 3840x2160 @30Hz	HDMI: 1920x1080 @60Hz	X* ¹	X	2
GF63 Thin 8RCS	GTX 1050	N/A	1	HDMI: 3840x2160 @30Hz	HDMI: 1920x1080 @60Hz	X* ¹	X	2

*1: Additional requirements are needed, please refer to the point 4 on page 1.

*2: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GF Series with 8th Gen. Intel Core Processor - 2/2



Notebook	Graphics	Video Output		External Display Output		3D BD Playback	NVIDIA Surround View*3	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
GF63 8RD	GTX 1050Ti	-	1	HDMI: 3840x2160 @30Hz	HDMI: 1920x1080 @120Hz	X*2	X	2
GF63 8RC	GTX 1050	-	1	HDMI: 3840x2160 @30Hz	HDMI: 1920x1080 @120Hz	X*2	X	2
GF72 8RE	GTX 1060	1 (v1.2)	1	HDMI*1: 3840x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X*2	✓	3
GF62 8RE	GTX 1060	1 (v1.2)	1	HDMI*1: 3840x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X*2	✓	3
GF72 8RD	GTX 1050Ti	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X*2	X	3
GF62 8RD	GTX 1050Ti	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X*2	X	3
GF72 8RC	GTX 1050	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X*2	X	3
GF62 8RC	GTX 1050	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @120Hz	X*2	X	3

*1: A native HDMI 2.0 with 4K resolution display supported monitor is necessary in order to achieve the 4K @60Hz display output.

*2: Additional requirements are needed, please refer to the point 4 on page 1.

*3: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.

GV Series with 8th Gen. Intel Core Processor - 1/1

Notebook	Graphics	Video Output		External Display Output		3D BD Playback	NVIDIA Surround View*3	Matrix Display (Incl. NB display)
		mDP	HDMI	4Kx2K	120Hz			
GV72 8RE	GTX 1060	1 (v1.2)	1	HDMI*1: 4096x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @60Hz	X*2	✓	3
GV62 8RE	GTX 1060	1 (v1.2)	1	HDMI*1: 4096x2160 @60Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @60Hz	X*2	✓	3
GV72 8RD	GTX 1050Ti	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @60Hz	X*2	X	3
GV62 8RD	GTX 1050Ti	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @60Hz	X*2	X	3
GV72 8RC	GTX 1050	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @60Hz	X*2	X	3
GV62 8RC	GTX 1050	1 (v1.2)	1	HDMI: 3840x2160 @30Hz mDP: 3840x2160 @60Hz	mDP: 2560x1440 @144Hz HDMI: 1920x1080 @60Hz	X*2	X	3

*1: A native HDMI 2.0 with 4K resolution display supported monitor is necessary in order to achieve the 4K @60Hz display output.

*2: Additional requirements are needed, please refer to the point 4 on page 1.

*3: At least two or more display outputs which connecting to NVIDIA graphics support NVIDIA Surround View. Refer to the point 5 on page 1.