XMG FOCUS (E23) Review Guide

Version 0.1 / March 28, 2023

Links to Official Information

Launch Post: https://www.xmg.gg/en/news-new-product-xmg-pro-focus-e23/

Box Downloads: https://schenker.box.com/v/pr-xmg-pro-focus-e23

Desktop Wallpapers: https://www.xmg.gg/wallpapers/

Product Pages:

- https://www.xmg.gg/en/xmg-focus-15-e23/
- https://www.xmg.gg/en/xmg-focus-16-e23/
- https://www.xmg.gg/en/xmg-focus-17-e23/

Configuration Pages:

- https://bestware.com/en/xmg-focus-15-e23.html
- https://bestware.com/en/xmg-focus-16-e23.html
- https://bestware.com/en/xmg-focus-17-e23.html

FAQ:

- https://www.xmg.gg/en/faq/
- https://www.xmg.gg/en/faq/portfolio/
- https://www.xmg.gg/en/faq/tips/
- https://www.xmg.gg/en/faq/troubleshooting/
- https://www.xmg.gg/en/faq/maintenance/

Latest Control Center and Firmware

Please make sure that you have the latest software installed:

- **BIOS** 1.07.06RTR4
- **EC** 1.07.03aTR2
- **Control Center** v6.021

Downloads: https://download.schenker-tech.de/package/xmg-focus-15-16-17-e23-xfo15e23-xfo16e23-xfo17e23/

Especially the EC firmware is important to get the latest fan control.

Latest NVIDIA Driver

NVIDIA has recently released a lot of bugfixes for RTX 40 series. Make sure you use the latest GameReady driver from: https://www.nvidia.com/en-us/geforce/drivers/

Performance Profiles

We recommend using the "Entertainment" profile for daily use.

There are substantial differences in fan noise between Entertainment and Performance, despite only relatively small performance differences. Reviews should at least compare a few representative scenarios (CPU benchmark, gaming benchmark, web/office) between both profiles to paint an accurate picture.

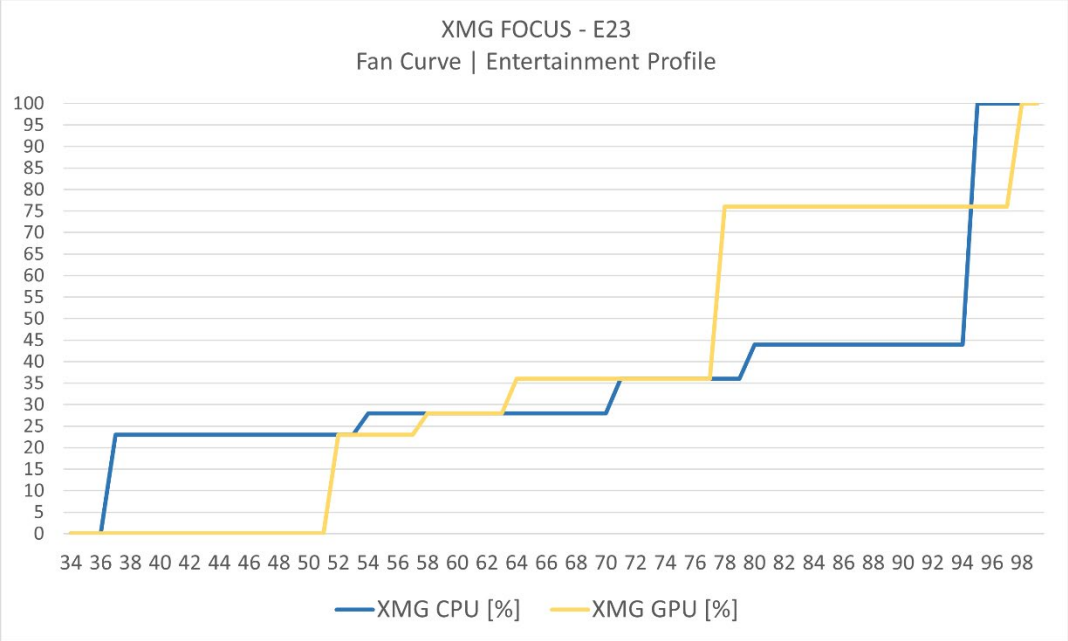
Quiet	CPU PL1	15 W
	CPU PL2	30 W
	CPU PL4	246 W
	CPU PL Tau	8 seconds
	CPU Temp Target	85 °C
	GPU Power (TGP)	115 W
	GPU Dynamic Boost	+ 0 W
	GPU Temp Target	87 °C
Entertainment	CPU PL1	55 W
	CPU PL2	130 W
	CPU PL4	246 W
	CPU PL Tau	56 seconds
	CPU Temp Target	87 °C
	GPU Power (TGP)	115 W
	GPU Dynamic Boost	+ 0 W
	GPU Temp Target	87 °C
Performance	CPU PL1	135 W
	CPU PL2	162 W
	CPU PL4	246 W
	CPU PL Tau	96 seconds
	CPU Temp Target	93 °C
	GPU Power (TGP)	115 W
	GPU Dynamic Boost	+ 25 W
	GPU Temp Target	87 °C

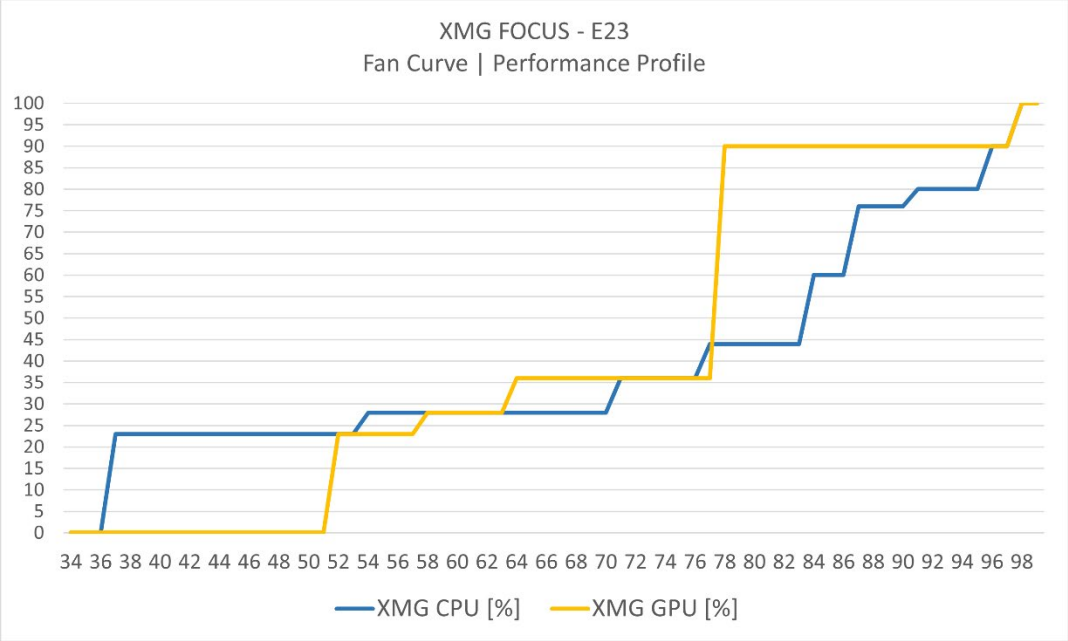
Fan Curves

For XMG and SCHENKER we have created customized fan curves to smooth out the original ODM fan table and lowered the CPU Temp Targets. The following table indicates the maximum fan speed for typical scenarios.

Scenario	Entertainment	Performance
Web/Office	28%	28%
Single Core Benchmark	44%	60%
All-Core Benchmark	44%	80%
GPU Stress Test	76%	90%
Full System Stress Test	76%	90%

XMG Fan Curves:





x-axis: temperature in °C
y-axis: fan speed in %

Internal Layout and Thermal Module

This picture shows the internal layout of XMG FOCUS 15 - E23.



XMG FOCUS 16 uses the same thermal module because it has the same chassis width. XMG FOCUS 17 uses a similar layout, just slightly enlarged.

Comparison GIF between M22 and E23 generation:

Click on this animated GIF:

- https://download.schenker-tech.de/media/products/xmg-focus_e23/xmg-focus-15_m22-vs-e23_comparison_anim.gif

Links to full resolution:

M22: https://download.schenker-tech.de/media/products/xmg-focus_e23/xmg-focus-15_m22_inside.webp

E23: https://download.schenker-tech.de/media/products/xmg-focus_e23/xmg-focus-15_e23_inside.webp

Notable upgrades:

- Heatspreader elements that were previous made of aluminum are now made of copper
- Previous model had 4 heatpipes, new model has 6 heatpipes
- Previous model had 5 volt fans, new model has 12 volts
- New fans have 79 fan blade to increase thermal output
- New model has dedicated heatpipe for GPU VRAM and MOSFETs

Comparison to M22 Generation

The following table shows the most important differences between M22 and E23 generations.

	XMG FOCUS - M22	XMG FOCUS 15 - E23	XMG FOCUS 16 - E23	XMG FOCUS 17 - E23
Launch Date	*Mid 2022*	*Early 2023*		
CPU Platform	Intel Core 12th Gen	Intel Core 13th Gen		
CPU Choice	Intel Core i7-12700H	Intel Core i9-13900HX		
Displays	15.6" Full HD 144 Hz 16.0" WQXGA 165 Hz 17.3" Full HD 144 Hz	15.6" Full HD 165 Hz 15.6" WQHD 240 Hz	16.0" WQXGA 165 Hz with 16:10 screen ratio	17.3" Full HD 240 Hz
Graphic Cards	RTX 3060	RTX 4050 RTX 4060 RTX 4070		
Hybrid Graphics	NVIDIA Optimus	NVIDIA Advanced Optimus		
MUX Layout	MUX Layout with RTX 3060 (NVIDIA Optimus can be disabled)	MUX Layout with all RTX 40 series (NVIDIA Optimus can be disabled)		
M.2 SSD Slots	1x PCIe Gen4 x4 1x PCIe Gen3 x4 or SATA	2x PCIe Gen4 x4		
Battery Capacity	54 Wh	73 Wh		
Power Supply	180 W	280 W		
z-height	FOCUS 15 | 23.9 mm FOCUS 16 | 24.3 mm FOCUS 17 | 25.0 mm	26.9 mm	27.5 mm	28.2 mm
System Weight	FOCUS 15 | 2.05 kg FOCUS 16 | 2.20 kg FOCUS 17 | 2.60 kg	2.40 kg	2.60 kg	2.90 kg

Disassembly

Upgrading SSD and RAM and cleaning the cooling system is easy. Remove all bottom case screws to open the laptop. A service manual will be provided in the download portal shortly.

Related FAQ articles:

- Disassembly for SSD and RAM upgrades: https://www.xmg.gg/en/faq/maintenance/#disassembly
- How to clean the cooling system: https://www.xmg.gg/en/faq/maintenance/#clean-cooling-system

LCD Panel Comparison

XMG FOCUS series (E23) is available with 4 different LCD panels. Notable highlights:

- All panels offer a 60 Hz fallback option
- All panels support G-SYNC and NVIDIA Advanced Optimus
- One panel is rated at 400 nits brightness
- Two panels are rated with 99% DCI-P3 color coverage

Please refer to this comparison:

	XMG FOCUS 15 (E23)		**XMG FOCUS 16 (E23)**	**XMG FOCUS 17 (E23)**
Display Spec	FHD 165Hz	WQHD 240Hz	WQXGA 165Hz	WQHD 240Hz
Model No.	BOE NV156FHM-NY8 V8.2	BOE NE156QHM-NZ3	BOE NE160QDM-NY1	BOE NE173QHM-NZ1 V8.1
Device ID	BOE0A1C	BOE0AD1	BOE0A1F	BOE09F9
Screen Ratio	16:9	16:9	16:10	16:9
Resolution	1920×1080 px	2560×1440 px	2560×1600 px	2560×1440 px
Refresh Rates	60Hz, 165Hz	60Hz, 240Hz	60Hz, 165Hz	60Hz, 240Hz
Maximum Brightness	300 cd/m²	300 cd/m²	400 cd/m²	300 cd/m²
sRGB Color Coverage	95%	99%	95%	99%
DCI-P3 Color Coverage	-	99%	-	99%
G-SYNC	✔	✔	✔	✔

Keyboard Layout

XMG and SCHENKER laptops are available with over 25 keyboard layouts.

Please note the following features in the layout of XMG FOCUS series:

- **True Full Numpad:** Follows exactly the layout of a standard desktop keyboard
- **Gap between Numpad and Alphabetic Keys:** The gap helps to hit keys like Backspace and Enter faster when typing blindly because you can "feel" the gap and don’t accidentally go into the numpad area.
- **Full Size Cursor Keys:** Cursor/Arrow keys (↑↓←→) are same size like alphabetic keys
- **Dedicated Navigation Keys:** PageUp, PageDn, Home, End - each function has a dedicated key without needing any Fn modifier
- **FnLock** and smart distribution of Fn key functions for single-handed control of the most common functions.

Remark on NVIDIA RTX 40 Series GPU Power

XMG FOCUS is able to max out the GPU power consumption of the RTX 40-series laptop GPUs (140 W for RTX 4050/4060/4070) in synthetic stress tests (e.g. FurMark). However, according to the NVIDIA specifications, the actual GPU power consumption depends on the type of workload. Therefore, the power consumption may be below (sometimes significantly lower) than the specified TGP and Dynamic Boost power draw values and is defined by NVIDIA.

About NVIDIA Advanced Optimus

What's the difference between NVIDIA Optimus and Advanced Optimus?

NVIDIA Optimus (aka 'MSHybrid') is a hybrid graphics solution where pictures that are rendered on the dGPU are funnelled through the iGPU toward the laptop display. On some laptop SKUs, NVIDIA Optimus can be disabled via a MUX switch. When Optimus is disabled, the iGPU is completely offline and the laptop display is directly connected to the dGPU. This kind of traditional MUX layout requires a system reboot for the switch to occur.

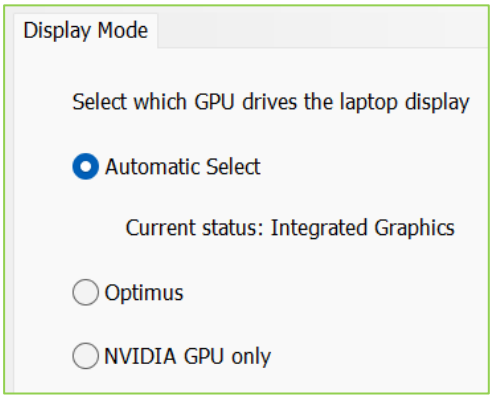
NVIDIA Advanced Optimus is basically a MUX switch that does ***not*** require a reboot.

When does the switch occur?

The switch happens automatically when the NVIDIA driver detects the launch of certain applications – typically most benchmarks and games. However, ***not all games*** and benchmarks trigger the switch. For example, 3DMark **Time Spy *does*** trigger the switch, but Geeks3D **FurMark** does ***not***. The number of applications that trigger the switch may increase with each NVIDIA driver update. Your NVIDIA press contact will be able to share further information on NVIDIA Advanced Optimus.

How do I know the switch has occurred?

During the automatic switch, the screen freezes for 2 to 3 seconds, including any mouse cursor movement. The screen will ***not*** turn black – it will just freeze momentarily. This short freeze time is normal by NVIDIA's standard and a technical necessity for the switch to occur. **Don't be surprised:** Windows might revert window positions to the previous arrangement after the switch, similar to how Windows remembers window arrangements on different external monitors. This, too, is normal and can not be prevented by NVIDIA.



How can I control NVIDIA Advanced Optimus?

On a system with support for NVIDIA Advanced Optimus, the NVIDIA Control Panel offers a new page called '**Manage Display mode**' (see picture on the top right) with 3 options:

Option	Default state	Description	G-SYNC support
Automatic Select	Default	This is NVIDIA Advanced Optimus.	✓
Optimus	-	This option represents traditional Optimus aka MSHybrid. Selecting this option will mean that no automatic switch (and no display freeze) will occur.	✕
NVIDIA GPU only	-	This option represents traditional MUX layout. It switches the system to Discrete mode, but without requiring a reboot.	✓

Product Naming, SEO and Referrals

We would appreciate to find the product name in the review/video title, even if it is just at the very end. This way, the review will be more easy to find on Google for prospective customers who already know about this product and who are looking for additional info.

Product naming:

Product Series Name		**Individual Product Name**	
In a lone-standing title	*With surrounding text*	*In a lone-standing title*	*With surrounding text*
XMG FOCUS - E23	XMG FOCUS (E23)	XMG FOCUS 15 - E23	XMG FOCUS 15 (E23)
		XMG FOCUS 16 - E23	XMG FOCUS 16 (E23)
		XMG FOCUS 17 - E23	XMG FOCUS 17 (E23)

Please note:

- FOCUS is written in all-caps
- The “E23” stands for the model year “Early 2023”
- You can use either bracket for “E23” or a hyphen.
    - Hyphens are suggested in a lone-standing title.
    - Brackets are suggested in a text or when the title contains additional information after the “E23” mark.

SEO tips:

We suggest to include the word “Gaming Notebook” in your review title.

Product Pages:

https://www.xmg.gg/en/xmg-focus-15-e23/

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Referrals & Affiliates

We can generate UTM referral codes for each reviewer, so that we can track the web engagement. Please get in touch with our PR contact window (Kai Tubbesing) for unique links and affiliate campaigns.

Thank you for reading this document. If you need more support or if you have any questions about the information in this document, please do not hesitate to contact us.