

## BUILT TUF

### ASUS Innovations

- **Axial-tech fan design** has been enhanced with more fan blades and a new rotation scheme.
- **Dual ball fan bearings** can last up to twice as long as sleeve bearing designs.
- **An all-aluminum shroud**, reinforced frame, and metal backplate enhance durability .
- **MaxContact heat spreader** features a super flat surface for improved thermal transfer.
- **A 144-hour validation** program puts cards through a series of stringent tests to ensure compatibility with the latest games.
- **A vented backplate** prevents hot air from recirculating through the cooling array.
- **GPU Tweak II** provides intuitive performance tweaking, thermal controls, and system monitoring.



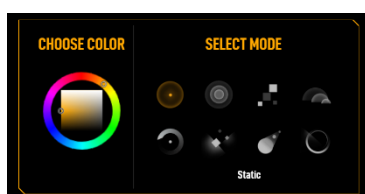
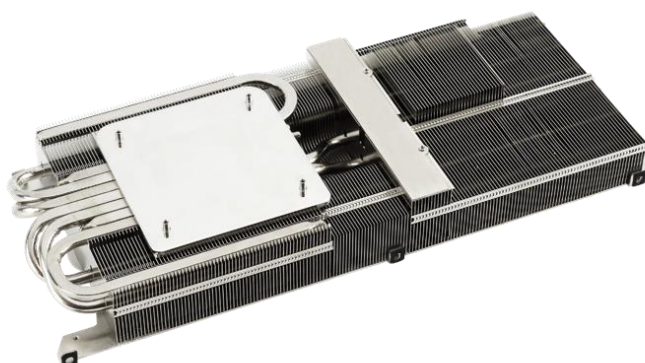
### Fresh Shroud

A new all-aluminum shroud adds a robust flair to TUF builds. The top-side RGB element can be customized with Armoury Crate to sync up with other ASUS components to enable uniform lighting.



### 2.9-slot Design

The heat spreader draws heat up into heatpipes that carry it through a fin stack that fills most of the card's large, 2.9-slot footprint.



## Armored Underside

The underside of the card reveals further improvements. Most of the rear is swathed in a protective metal backplate that prominently features a wide vent. The vent allows hot air to escape towards chassis exhaust fans instead of being recycled back into the GPU cooler. A GPU bracket provides extra stability to the critical connection between die and heat spreader. Stainless steel is used for the I/O bracket to protect ports and provide a more secure mount. And a conveniently placed Dual Bios switch allows customization of the card's default performance profile without software.



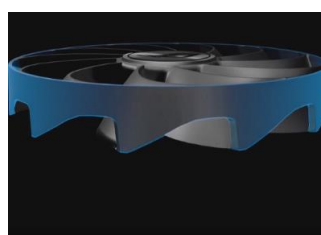
## Software Suite

Hardware and software come together to let gamers fully customize and control their gaming experience. GPU Tweak II enables tweaks and monitoring, XSplit offers a robust streaming solution, and wtfast can improve routing to game servers for a more stable gaming connection.

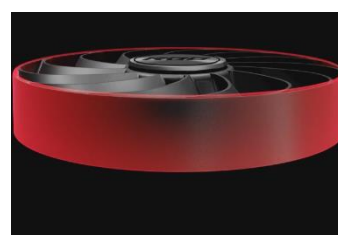


## Axial-tech Upgrades

The blade count has been increased on all three fans, with 13 on the center fan and 11 on the auxiliary fans. The barrier ring on the side fans has been slimmed down to allow for more lateral intake and to provide better airflow through the cooling array. The center fan's extra blades and full-height ring provide boosted static pressure to blast air directly onto the GPU heat spreader.



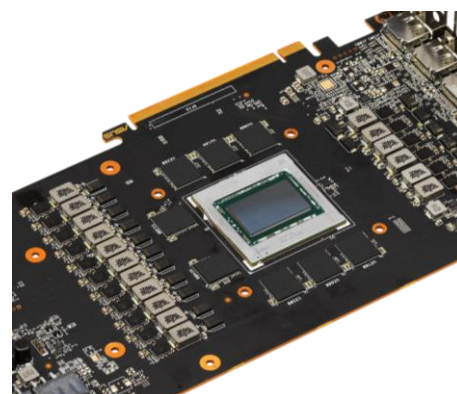
The two side fans feature a slotted barrier ring



Central fan has a full-width barrier ring

## TUF Components

Robust military-grade capacitors were selected for the card's power design. They and other components are soldered to the PCB using our Auto-Extreme automated manufacturing process. Precise joints and the elimination of human error ensures each graphics card meets our rigorous specifications. To ensure flawless performance when it counts, the cards are subjected to a grueling 144-hour validation trial.



## ASUS Features

**OC**  
Edition

### OC edition

TBD MHz GPU boost clock and TBD memory speed in OC mode for outstanding gaming experience.



### 16GB GDDR6 Memory

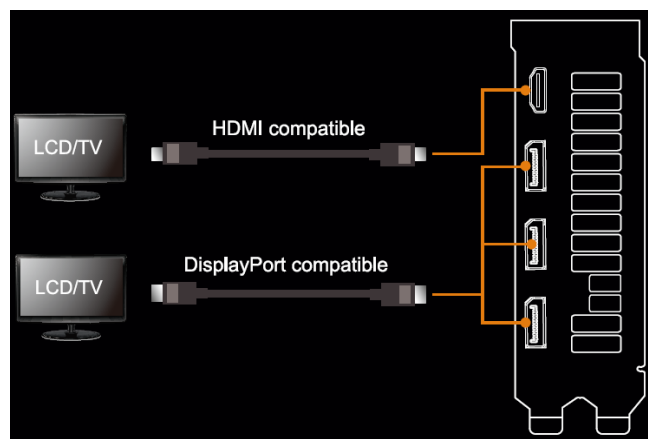
On-board memory for the best gaming experience & the best resolution.

**0dB**  
FAN  
Silent Gaming

### 0dB Technology

An advanced controller brings fans to a standstill below 60 Celsius, letting you enjoy light gaming in relative silence.

## I/O Specifications



## AMD Features

**AMD**  
**RDNA 2**

### AMD RDNA™ 2 Architecture with Hardware Raytracing

With enhanced compute units, delivering **hardware raytracing** and **variable rate shading**, AMD RDNA™ 2 Architecture is the foundation of the next generation of enthusiast gaming platforms from desktops to gaming consoles.



### High Performance 4K Gaming

With enhanced compute units delivering powerhouse performance, 4K gaming is now easily possible at smooth framerates and maximum visual settings.

**AMD**  
**FidelityFX**

### AMD FidelityFX

AMD FidelityFX enables a plethora of lighting, shadow, and reflection effects in the latest games with minimal performance overhead, freeing up your graphics card to power the intense gaming experiences you demand.



### PCI® Express 4.0 Support

Features PCI® Express 4.0 support, with a throughput of 16 GT/s and enables two times the bandwidth compared to PCI® Express 3.0.

### Radeon™ Anti-Lag

Less lag equals more wins. Radeon Anti-Lag reduces latency, providing ultra-fast response time giving you a dynamic edge over your competition

### Modern Display Technologies

- Enjoy high-refresh, tear-free, stutter-free gaming by pairing your AMD Radeon™ graphics card with a certified AMD FreeSync technology-enabled monitor.
- Support for HDMI 2.1 VRR, expands fluid gaming experiences to all HDMI 2.1 VRR enabled displays.
- With modern I/O such as USB-C, power the latest in VR head-mounted displays with just one cable.

## Specifications

Model name	TUF-RX6800XT-O16G-GAMING
Graphics Engine	AMD Radeon™ RX 6800 XT
Stream Processors	4608
OpenGL®	OpenGL® 4.6
Engine Clock	TBD
Memory Interface	256-bit
Video Memory	16GB GDDR6
Memory Speed	16 Gbps
Power Connector	2 x 8 pin
I/O	1 x Native HDMI 2.1 3 x Native DisplayPort 1.4
HDCP Compliant	HDCP 2.3
Digital Max. Resolution	7680 x 4320
Maximum Display Support	4
NVLink/Crossfire Support	Yes for DirectX® 12 and Vulkan®
Recommended PSU	750 W
Bus Standard	PCIe 4.0
Package Contents	1 x TUF certificate of Reliability 1 x ASUS ruler 1 x Collection card 1 x Speedsetup Manual
Software Bundled	ASUS GPU Tweak II & Driver (please download all software from the support site)
Slot	2.9 slot
Dimension	
Card Size (mm/inch)	12.598" x 5.52" x 2.276" inch 32 x 14.02 x 5.78 cm
Color Box (mm)	405 x 233 x 88.5 mm
Weight	
Single Card (KG)	1.718
Product Weight (with packing) (KG)	2.3
Note	* Boost Clock is the maximum frequency achievable on the GPU running a bursty workload. Boost clock achievability, frequency, and sustainability will vary based on several factors, including but not limited to: thermal conditions and variation in applications and workloads.



applications, set to typical TGP (Total Graphics Power). Actual individual game clock results may vary.

\*\*\* All specifications are subject to change without notice. Please check with your supplier for exact offers. Products may not be available in all markets. If you do not use the latest and current specifications of ASUS products, you shall be liable for all loss and damage claimed by third party to ASUS based on false advertising or any other issues caused from using false specifications of ASUS products.



