

## GAINWARD GeForce RTX 2070 SUPER Phantom

### Specifications

Process Technology	12nm	Boost Clock	1770 MHz
CUDA Cores	2560	Max. TGP	215W
Memory Amount	8 GB	Memory Clock	7000 MHz
Memory Type	256b GDDR6	Memory Bandwidth	448 (GB/Sec)

### Key Features

- NVIDIA Turing Architecture, 12nm IC Process
- 14Gbps GDDR6 Memory
- 52T RTX-OPS
- Real-Time Ray Tracing
- Tensor Cores
- NVIDIA® GeForce Experience™
- NVIDIA Ansel
- NVIDIA Highlights
- NVIDIA G-SYNC®-Compatible
- Game Ready Drivers
- Microsoft® DirectX® 12 API, Vulkan API, OpenGL 4/5
- NVIDIA GPU Boost™
- NVIDIA NVLink™ (NVIDIA SLI®)
- VR Ready
- 3\* DisplayPort 1.4, HDMI 2.0b
- HDCP 2.2
- Maximum Total Board Power – 215W



### GAINWARD Unique Features

#### Expertool //



- ✓ GAINWARD's Expertool II – the brand-new utility adds flexible fan curve control and BIOS saving feature for powerful
- ✓ GeForce RTX 2070 SUPER card.



- ✓ GAINWARD superior hardware design provides massive capability for over-clocking and stable operating environment under all kinds of gaming application.



### Output Support



HDMI : (max. resolution)  
4096x2160@60Hz  
DP \*3 : (max. resolution)  
7680x4320@60Hz

### Dimension

Board: 292mm(L)x130mm(W)  
Cooler : 2.7 slot  
Bracket: 2 slot

### Accessory

1. Manual
2. Power cable

### Minimum System Requirements

Graphics card require:

- PCI Express-compliant motherboard with one dual-width x16 graphics slot
- Two 8-pin PCI Express supplementary power connectors
- Minimum 650W or greater system power supply
- Microsoft® Windows® 10 64-bit (November 2018 or later), Windows® 7 64-bit, Linux 64-bit

GW GeForce RTX 2070s Phantom\_bar code: 471056224-1204

[www.gainward.com](http://www.gainward.com)

# GAINWARD PHANTOM



## GAINWARD superior hardware design

GAINWARD re-designs the entire hardware, that brings higher stability under high current operation (heavy loading operation).

## DrMOS

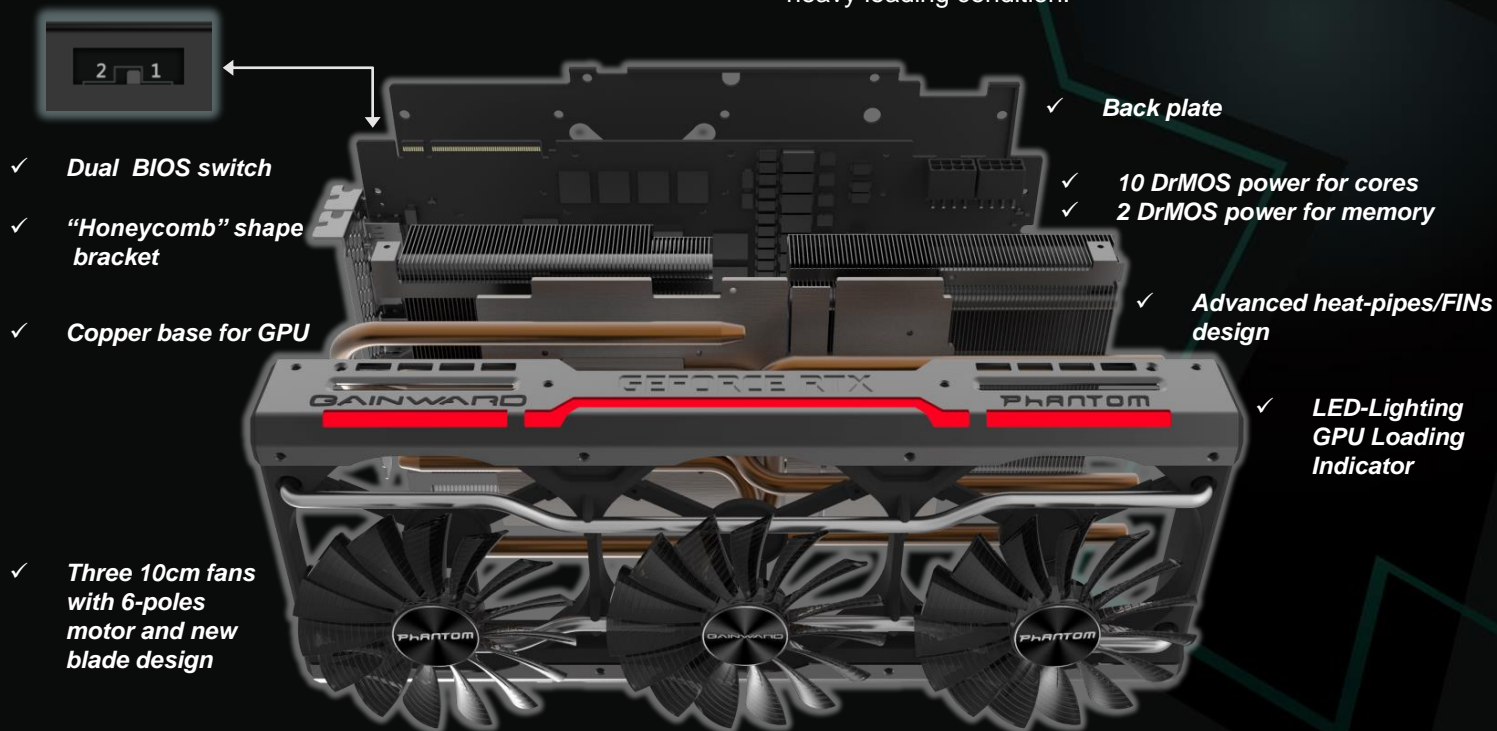
DrMOS is designed to handle high current with low noise operation and less heat generating.

## Extreme silent acoustics in heavy loading mode

GAINWARD GeForce RTX 2070 SUPER Phantom runs very quiet under full load operation thanks to the new Phantom fan design.

## Extreme cool temperature in heavy loading mode

GAINWARD GeForce RTX 2070 SUPER Phantom performs extremely low GPU temperature even under heavy loading condition.



## Dual BIOS (1: Normal, 2: Zero RPM)

GAINWARD provides two VBIOS for GeForce RTX 2070 SUPER Phantom board. Standard VBIOS is set on position #1 of the "dual BIOS switch".

Users can switch to second VBIOS on position #2, adding "Zero RPM" fan control feature to enjoy the quietest experience as well as low GPU temperature.

## 6-Poles Fan Motor

6-poles fan motor vs 4-poles motor (normal fan)

- Smaller hub size that increases 10% efficiency area of the fan
- Lower power consumption - up to 30% current reduce
- Smoother spinning – lower electric noise, lower vibration (longer lifespan)

## Expertool II

GAINWARD's Expertool II – the brand-new utility adds flexible and individual fan curve control and VBIOS saving feature for powerful GeForce RTX 2070 SUPER card.