

# GAINWARD

Premium Brand of #1 NVIDIA Board Partner

## Gainward GeForce GTX 970 PHOENIX

### Specifications

Process Technology	28nm	Base Clock	1152 MHz
Processor Cores	1664 cores	Boost Clock	1304 MHz
Memory Amount	4096MB	Memory Clock	3500 MHz
Memory Type	256b GDDR5	Memory Bandwidth	224 (GB/Sec)

### Key Features

- Next generation NVIDIA Maxwell architecture
- NVIDIA GPU Boost 2.0
- NVIDIA Dynamic Super Resolution technology
- NVIDIA MFAA technology
- NVIDIA GameStream technology
- NVIDIA GameWorks technology
- NVIDIA SHIELD ready
- NVIDIA Adaptive Vertical Sync
- NVIDIA G-SYNC ready
- Microsoft DirectX 12 support
- NVIDIA PhysX technology
- NVIDIA CUDA technology
- NVIDIA 3D Vision and NVIDIA Surround ready
- NVIDIA SLI technology
- PCI Express 3.0 support
- OpenGL 4.5 and OpenCL support
- Support for four concurrent displays



### Output Support



HDMI : (max. resolution)  
4096x2160@60Hz  
miniDP \*2 : (max. resolution)  
4096x2160@60Hz  
DVI-I : (max. resolution)  
2560x1600@60Hz

### Dimension

Board: 247mm(L)x124mm(W)  
Cooler :2.5 slot  
Bracket: 2 slot

### Accessory

1. Driver Disc
2. Manual
3. Power cable
4. DVI to VGA dongle

### PHOENIX

4096MB



### Gainward Unique Features

- ✓ New fan design



- ✓ Zero RPM fan design
- ✓ EXPERTool II



Gainward's Expertool II – the brand-new utility adds flexible fan curve control and BIOS saving feature for powerful GTX 970 card.

### Minimum system requirements

Graphics card require:

- PCI Express-compliant motherboard with two and half width x16 graphics slot
- Two 6-pin PCI Express supplementary power connectors
- Minimum 500W or greater system power supply
- Microsoft Windows 10, 8/8.1, 7 and Windows Vista

GW GTX970\_Phoenix\_bar code: 426018336-3521



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# PHOENIX



## ✓ Gainward new fan design

### Dual 90mm fan

- ✓ great thermal performance
- ✓ super low acoustic level
- ✓ low components temperature to ensure long life time

### Zero RPM fan design

- ✓ All the fans will start to work for cooling the board when the GPU's temperature raises to 60° C or higher.
- ✓ Keep silent while under light loading operation

### ✓ Extreme silent acoustics in heavy loading mode

With the new cooler, Gainward GTX 970 Phoenix with factory over-clocked speed gets **9dB** quieter lower than reference board (reference clock) under full load operation.

### ✓ Extreme cool temperature in heavy loading mode

Thanks to the new cooler, Gainward GTX 970 Phoenix with factory over-clocked speed performs **7.5° C** lower GPU temperature than reference board with reference clock.

All display ports located in a row, leave enough space on the top for the hot air to flow out.

All the connectors are metal-shielding, for EMI shielding and dustproof

Four simultaneous displays on one single GTX 970 Phoenix board, up to three UHD (4K) monitors surround and an accessory display.

## ✓ Superior Hardware Design

With the experience of the Gainward's award winning high-performance/wide-bandwidth hardware design, GeForce GTX 970 Phoenix, again, with re-designing the entire hardware, that brings –

- 1) lower energy loss
- 2) lower EMI level
- 3) higher stability under high current operation (heavy loading operation).

## ✓ DrMOS

Gainward continues using DrMOS in those 4 phases PWM for core power circuit. DrMOS is designed to handle high current with low noise operation and less heat generating.

Thanks to superior hardware design, Gainward's GeForce GTX 970 Phoenix gains not only more power efficiency but better performance while gaming.

## ✓ Expertool II



Gainward's Expertool II – the brand-new utility adds flexible fan curve control and BIOS saving feature for powerful GTX 970 Phoenix board.

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