Gainward GeForce GTX 970

PHOENIX

Specifications

<table>
<thead>
<tr>
<th>Process Technology</th>
<th>28nm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processor Cores</td>
<td>1664 cores</td>
</tr>
<tr>
<td>Memory Amount</td>
<td>4096MB</td>
</tr>
<tr>
<td>Memory Type</td>
<td>256b GDDR5</td>
</tr>
<tr>
<td>Base Clock</td>
<td>1152 MHz</td>
</tr>
<tr>
<td>Boost Clock</td>
<td>1304 MHz</td>
</tr>
<tr>
<td>Memory Clock</td>
<td>3500 MHz</td>
</tr>
<tr>
<td>Memory Bandwidth</td>
<td>224 (GB/Sec)</td>
</tr>
</tbody>
</table>

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

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.

Output Support

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

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

Dimension

- Board: 247mm(L) x 124mm(W)
- Cooler: 2.5 slot
- Bracket: 2 slot

Accessory

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

GW GTX970_Phoenix_bar code: 426018336-3521

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✓ 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.

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.

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.