

EVGA 08G-P4-6276-KR

EVGA GeForce GTX 1070 FTW GAMING ACX 3.0 Graphics Card User Manual

Model: 08G-P4-6276-KR

1. INTRODUCTION

This manual provides comprehensive instructions for the installation, operation, maintenance, and troubleshooting of your EVGA GeForce GTX 1070 FTW GAMING ACX 3.0 graphics card. This high-performance graphics card is designed to deliver an exceptional visual experience for gaming and demanding applications. It features NVIDIA's Pascal architecture, EVGA ACX 3.0 cooling technology, RGB LED lighting, and a double BIOS for enhanced reliability and customization.

Please read this manual carefully before installing and operating your new graphics card to ensure proper functionality and to maximize its performance and lifespan.

2. WHAT'S IN THE BOX

Verify that all components are present in your package:

- EVGA GTX 1070 FTW GAMING ACX 3.0 Graphics Card
- Driver CD
- Installation Guide
- 6Pin(2) to 8 Pin Adapter
- EVGA Gaming Poster
- Powered by EVGA Case Badge
- EVGA Enthusiast Built Sticker



Image: Retail packaging for the EVGA GeForce GTX 1070 FTW GAMING ACX 3.0 graphics card.

3. SYSTEM REQUIREMENTS

Before installing your graphics card, ensure your system meets the following minimum requirements:

- **Motherboard:** PCI Express, PCI Express 2.0, or PCI Express 3.0 compliant motherboard with one graphics slot.
- **Power Supply:** Minimum 500 Watt or greater power supply with two 8-pin PCI Express power connectors.
- **Operating System:** Windows 10 (32/64bit), Windows 8 (32/64bit), or Windows 7 (32/64bit).
- **Memory:** 4GB system memory (8GB recommended).
- **Storage:** 100MB of available hard-disk space for driver installation.
- **Display:** DVI, HDMI, or DisplayPort compatible monitor.

4. SETUP AND INSTALLATION

Follow these steps to install your EVGA GeForce GTX 1070 FTW GAMING ACX 3.0 graphics card:

1. Prepare Your System:

- Turn off your computer and disconnect the power cable from the wall outlet.
- Open your computer case.
- If an existing graphics card is installed, carefully remove it.

2. Install the Graphics Card:

- Locate an available PCI Express x16 slot on your motherboard.
- Remove the corresponding expansion slot covers from your computer case.
- Align the graphics card with the PCI Express slot and press down firmly until it is securely seated.
- Secure the card to the case with the retaining screw or clip.




Image: Front view of the EVGA GeForce GTX 1070 FTW GAMING ACX 3.0 graphics card, showing the dual fans and ACX 3.0 cooler.

3. Connect Power Cables:

- Connect two 8-pin PCI Express power connectors from your power supply to the corresponding ports on the top edge of the graphics card.
- If your power supply only has 6-pin connectors, use the provided 6Pin(2) to 8 Pin Adapter.



Image: Top view of the graphics card, highlighting the two 8-pin power connectors.



The EVGA GeForce GTX 1070 featuring EVGA ACX 3.0 cooling has arrived. This new graphics card features NVIDIA's new "Pascal" graphics processor which is the most advanced gaming GPU ever created. This breakthrough GPU delivers industry-leading performance, innovative new gaming technologies, and immersive, next-gen VR.

These cards also feature EVGA ACX 3.0 cooling technology. EVGA ACX 3.0 once again brings new and exciting features to the award winning EVGA ACX cooling technology: SHP 2.0 gives increased heatpipes and copper contact area for cooler operation, and optimized fan curve for even quieter gaming. Of course, ACX 3.0 coolers also feature optimized swept fan blades, double ball bearings and an extreme low power motor, delivering more air flow with less power, unlocking additional power for the GPU. Select EVGA ACX 3.0 models will even feature a 10CM fan and RGB LED, allowing complete control over the color from EVGA PrecisionX OC.

SPECIFICATIONS	KEY FEATURES	RESOLUTION & REFRESH
<ul style="list-style-type: none"> Base Clock: 1607 MHz Boost Clock: 1797 MHz Memory Clock: 8008 MHz Effective CUDA Cores: 1920 Bus Type: PCI-E 3.0 Memory Detail: 8192MB GDDR5 Memory Bit Width: 256 Bit Memory Speed: 0.24ns Memory Bandwidth: 256.3 GB/s LED Logo: Yes 	<ul style="list-style-type: none"> EVGA Double BIOS Simultaneous Multi-Projection VR Ready NVIDIA Ansel NVIDIA SLI w/ HB Bridge Support NVIDIA G-SYNC NVIDIA GameStream NVIDIA GPU Boost 3.0 Microsoft DirectX 12 Vulkan API OpenGL 4.5 Support PCI Express 3.0 Max Digital Resolution - 7680x4320 HDMI 2.0b, DisplayPort 1.4 and Dual-Link DVI Built for EVGA PrecisionX OC EVGA ACX 3.0 Cooling 10 Phase Power Design Adjustable RGB LED 	<ul style="list-style-type: none"> Max Monitors Supported: 4 240Hz Max Refresh Rate Max Digital: 7680x4320

REQUIREMENTS

- 500 Watt or greater power supply****
- PCI Express, PCI Express 2.0 or PCI Express 3.0 compliant motherboard with one graphics slot
- Two available 8-pin or 6+2pin PCI-E power dongles
- Windows 10 32/64bit Windows 8 32/64bit Windows 7 32/64bit

DIMENSIONS

- Height: 5.064in - 128.626mm
- Length: 10.5in - 266.7mm
- Width: Dual Slot

OUTPUTS

DVI-D Display Port Display Port Display Port HDMI

*DVI-D = Digital Only. Please do not connect to "DVI to VGA" adapter

**Support for HDMI includes GPU-accelerated Blu-ray 3D support (Blu-ray 3D playback requires the purchase of a compatible software player from CyberLink, ArcSoft, Corel, or Sonic). x.v.Color, HDR10 Deep Color, and 7.1 digital surround sound. Upgrade your GPU to full 3D capability with NVIDIA 3D TV Play software, enabling 3D gaming, picture viewing, and 3D web video streaming.

****Minimum system power requirement based on a PC configured with an Intel Core i7 3.2GHz processor

Image: A 6-pin to 8-pin PCI Express power adapter cable.

4. Close Case and Connect Display:

- Close your computer case.
- Connect your display monitor to one of the output ports on the graphics card (DisplayPort, HDMI, or DVI).



Image: Rear I/O panel of the graphics card, showing DisplayPort, HDMI, and DVI outputs.

5. Power On and Install Drivers:

- Reconnect the power cable and turn on your computer.
- Once Windows loads, install the graphics drivers from the included CD or download the latest drivers from the

official NVIDIA or EVGA website.

5. OPERATING INSTRUCTIONS

After successful installation and driver setup, your EVGA GeForce GTX 1070 FTW GAMING ACX 3.0 graphics card is ready for use. The card will automatically manage its clock speeds and power consumption based on the workload.

5.1 EVGA PrecisionX OC Software

For advanced control and monitoring, install the EVGA PrecisionX OC software. This utility allows you to:

- Monitor GPU temperature, clock speeds, and fan speeds.
- Adjust clock speeds for overclocking.
- Customize the RGB LED lighting on the card.
- Create custom fan curves for optimized cooling and noise levels.
- Utilize DX12 OSD (On-Screen Display) for real-time performance metrics in games.

5.2 Double BIOS Feature

The graphics card is equipped with a Double BIOS feature, providing a backup BIOS in case of a failed overclock or BIOS corruption. A small switch on the card allows you to toggle between the primary and secondary BIOS. This feature enhances reliability and safety during experimentation with custom settings.

5.3 ACX 3.0 Cooling Technology

The EVGA ACX 3.0 cooling system features optimized swept fan blades, double ball bearings, and an extreme low power motor. This design delivers increased airflow with less power consumption, contributing to cooler operation and quieter gaming. SHP 2.0 technology further enhances cooling with increased heat pipes and copper contact area.

6. MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your graphics card:

- **Keep Drivers Updated:** Regularly check the NVIDIA or EVGA website for the latest graphics drivers. Updated drivers often include performance improvements, bug fixes, and compatibility enhancements.
- **Dust Removal:** Periodically clean dust from the graphics card fans and heatsink using compressed air. Ensure the computer is powered off and unplugged before cleaning. Dust buildup can impede cooling performance.
- **Monitor Temperatures:** Use EVGA PrecisionX OC or similar software to monitor GPU temperatures, especially during heavy loads. Ensure temperatures remain within safe operating limits (typically below 80-85°C under load).
- **Ensure Proper Airflow:** Maintain good airflow within your computer case by ensuring proper cable management and adequate case fans.

7. TROUBLESHOOTING

If you encounter issues with your graphics card, refer to the following troubleshooting tips:

- **No Display Output:**
 - Ensure the monitor cable is securely connected to the graphics card and the monitor.
 - Verify that the graphics card is fully seated in the PCI Express slot.
 - Confirm that all required 8-pin power connectors are securely attached to the graphics card.

- Test with a different monitor or cable if possible.
- **System Instability or Crashes:**
 - Ensure graphics drivers are up to date. Consider performing a clean installation of drivers.
 - Check GPU temperatures. Overheating can cause instability.
 - Verify your power supply meets the minimum wattage requirement and provides stable power.
 - If overclocking, revert to default clock speeds to rule out instability caused by aggressive settings.
- **Poor Performance in Games:**
 - Ensure graphics drivers are up to date.
 - Check in-game graphics settings; reduce settings if necessary.
 - Monitor GPU usage and clock speeds using PrecisionX OC to ensure the card is boosting correctly.
 - Verify that your CPU and RAM are not bottlenecking the GPU.
- **RGB LED Not Working:**
 - Ensure EVGA PrecisionX OC software is installed and running.
 - Check LED settings within PrecisionX OC.

8. SPECIFICATIONS

Detailed technical specifications for the EVGA GeForce GTX 1070 FTW GAMING ACX 3.0 (Model: 08G-P4-6276-KR):

Feature	Specification
GPU	NVIDIA GeForce GTX 1070
CUDA Cores	1920
Base Clock	1607 MHz
Boost Clock	1797 MHz
Memory Detail	8192MB GDDR5
Memory Clock	8000 MHz Effective
Memory Bit Width	256 Bit
Memory Bandwidth	256.3 GB/s
Interface	PCI Express 3.0
Max Digital Resolution	7680x4320
Max Monitors Supported	4
Video Output	HDMI, DisplayPort 1.4, Dual-Link DVI
Power Connectors	Two 8-pin
Dimensions (LxWxH)	10.5 x 5.06 x 1.5 inches (266.7 x 128.625 x 38.1 mm)
Weight	3 pounds

Feature	Specification
Cooling	EVGA ACX 3.0
Features	RGB LED, Double BIOS, DX12 OSD Support (PXOC)

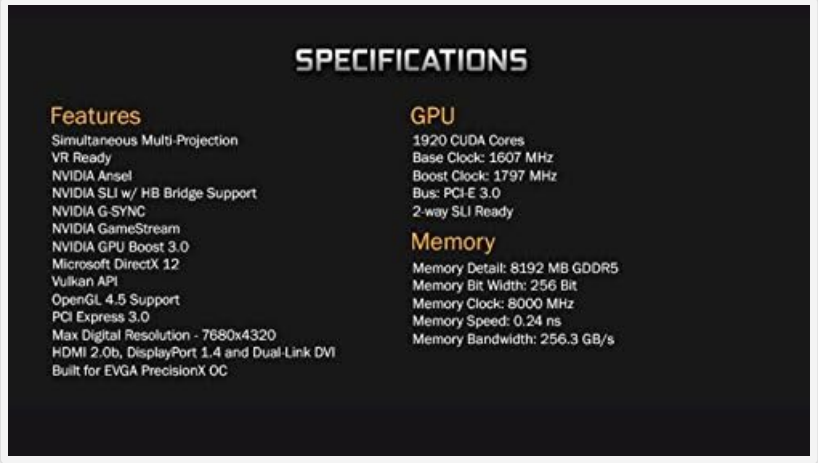


Image: A chart detailing the specifications of the EVGA GeForce GTX 1070 FTW GAMING ACX 3.0 graphics card.

9. WARRANTY AND SUPPORT

EVGA products are backed by a limited warranty. For specific warranty terms and conditions applicable to your region and product, please visit the official EVGA website. Registration of your product is recommended to facilitate warranty claims and access support resources.

9.1 Technical Support

For technical assistance, driver downloads, or further information, please visit the EVGA support website:

[EVGA Support Website](#)

You can also find FAQs, user forums, and contact information for customer service on their website.