EVGA 02G-P4-2643-KR

EVGA GeForce GT 640 Graphics Card User Manual

Model: 02G-P4-2643-KR

Brand: EVGA

1. INTRODUCTION

This manual provides essential information for the installation, operation, maintenance, and troubleshooting of your EVGA GeForce GT 640 graphics card. Designed to deliver premium multimedia performance and reliable entry-level gaming, this card utilizes the powerful next-generation GeForce architecture.

Figure 1.1: EVGA GeForce GT 640 Graphics Card and its retail packaging.

2. SETUP AND INSTALLATION

Before installing the graphics card, ensure your computer is powered off and unplugged from the wall outlet. It is recommended to wear an anti-static wrist strap to prevent damage from static discharge.

2.1 System Requirements

- PCI Express x16 slot available.
- Minimum 350W power supply (check manufacturer's recommendations for specific system configurations).
- Compatible operating system (Windows, Linux, macOS with appropriate drivers).
- At least 2GB of system memory.

2.2 Hardware Installation

1. Open your computer case.

2. Locate an available PCI Express x16 slot on your motherboard.

3. Remove the metal bracket cover from the back of the computer case corresponding to the chosen slot. Note that this card may occupy two expansion slots due to its cooling solution.

4. Carefully align the graphics card with the PCI Express slot and press down firmly until it is securely seated.

5. Secure the card with the screw or latch mechanism provided by your computer case.

6. Close your computer case.

Figure 2.1: The EVGA GeForce GT 640 graphics card, showing its fan and PCI-E connector, ready for installation.

3. OPERATION

3.1 Driver Installation

After hardware installation, connect your monitor to one of the card's display outputs (DVI or mHDMI). Power on your computer. The operating system may install a basic driver, but for full functionality and optimal performance, it is crucial to install the latest drivers from the NVIDIA or EVGA official website.

1. Visit the official EVGA or NVIDIA website.

2. Navigate to the 'Drivers' or 'Support' section.

3. Select your product: GeForce GT 640.

4. Download the latest compatible driver for your operating system.

5. Run the downloaded installer and follow the on-screen instructions. A system restart may be required.

3.2 Connecting Displays

The EVGA GeForce GT 640 features multiple display outputs for connecting monitors. It typically includes two DVI ports and one mini-HDMI port.

Figure 3.1: Display output ports on the EVGA GeForce GT 640 graphics card, including two DVI ports and one mini-HDMI port.

- **DVI (Digital Visual Interface):** Connect DVI-compatible monitors directly.
- **Mini-HDMI:** Use a mini-HDMI to HDMI cable to connect to HDMI-compatible displays, including TVs.

You can configure multiple displays through your operating system's display settings after driver installation.

4. MAINTENANCE

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

4.1 Cleaning

- Periodically clean the fan and heatsink of the graphics card to prevent dust buildup, which can lead to overheating.
- Use compressed air to gently blow dust away from the fan blades and heatsink fins.
- Ensure the computer is powered off and unplugged before cleaning.

4.2 Driver Updates

Regularly check for and install the latest graphics drivers from the NVIDIA or EVGA website. Driver updates often include performance improvements, bug fixes, and compatibility enhancements for new software and games.

5. TROUBLESHOOTING

This section addresses common issues you might encounter with your graphics card.

5.1 No Display Output

- Ensure the monitor cable is securely connected to both the graphics card and the monitor.
- Verify the monitor is powered on and set to the correct input source.
- Check if the graphics card is fully seated in its PCI Express slot.
- If your motherboard has integrated graphics, ensure the BIOS is configured to use the dedicated graphics card.

5.2 Driver Issues or Crashes

- Perform a clean installation of the latest drivers. Uninstall any previous graphics drivers before installing new ones.
- Ensure your operating system is up to date.
- Check for conflicts with other installed software.

5.3 Overheating

- Clean the graphics card fan and heatsink as described in the Maintenance section.
- Ensure adequate airflow within your computer case. Improve case ventilation if necessary.
- Monitor GPU temperatures using third-party software.

6. SPECIFICATIONS

Key technical specifications for the EVGA GeForce GT 640 graphics card (Model: 02G-P4-2643-KR).

Feature	Detail
GPU Clock	901 MHz
Memory Clock	1782 MHz

Feature	Detail
CUDA Cores	384
Memory Size	2048MB GDDR3
Memory Interface	128-bit
Bus Type	PCI-e 3.0
Product Dimensions	6.7 x 0.75 x 4.38 inches
Video Output Interface	Dual DVI, mHDMI
DirectX Support	DirectX 12 API (feature level 11_0)
OpenGL Support	OpenGL 4.2
Other Technologies	Nvidia SMX Engine, Adaptive Vertical Sync, Nvidia Surround, PureVideoHD, CUDA, PhysX, TrueHD, Nvidia 3D Vision, Open CL

7. WARRANTY AND SUPPORT

7.1 Product Warranty

EVGA products are covered by a limited warranty. For detailed information regarding the warranty period, terms, and conditions applicable to your EVGA GeForce GT 640 graphics card, please refer to the official EVGA website or the warranty card included with your product. Keep your proof of purchase for warranty claims.
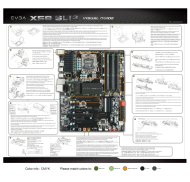
7.2 Technical Support

For technical assistance, driver downloads, FAQs, and community forums, please visit the official EVGA support website:

https://www.evga.com/support/

You may also find helpful resources and contact information on the product's Amazon page or by searching for 'EVGA support' online.

Related Documents - 02G-P4-2643-KR

EVGA GeForce GTX 1080 Ti SC HYBRID Installation Guide
This guide provides step-by-step instructions for installing the EVGA GeForce GTX 1080 Ti SC HYBRID Cooling Kit. It covers component identification, disassembly of the original graphics card cooler, and assembly of the new HYBRID module, including radiator mounting and cable connections. Important information regarding warranty and compatibility is also provided.

	[EVGA GeForce RTX 2080 Ti KINGPIN Edition OC Guide: Overclocking, Performance, and Features](#) Detailed overclocking guide for the EVGA GeForce RTX 2080 Ti KINGPIN Edition graphics card. Covers advanced power design, 12-layer PCB benefits, watercooling, performance benchmarks, EVGA Precision X1 software, and probe points for extreme overclocking.
	[EVGA GeForce RTX 3080 Ti FTW3 Ultra Gaming Quick Start Guide and Warranty](#) Quick start guide for the EVGA GeForce RTX 3080 Ti FTW3 Ultra Gaming (12G-P5-3967-KR), covering minimum system requirements, operating system compatibility, included equipment, and EVGA's limited warranty for Australia and New Zealand. Includes HDMI information and RoHS compliance details.
	[EVGA X58 SLI3 Motherboard Visual Installation Guide](#) A comprehensive visual guide for installing the EVGA X58 SLI3 motherboard, covering CPU, RAM, graphics card, storage, and power connections, along with system startup procedures and component identification.
	[EVGA Graphics Card User Guide - Installation, Setup, and Support](#) Comprehensive user guide for EVGA graphics cards, covering installation, software setup, SLI configuration, troubleshooting, and support resources. Includes details on hardware installation, driver installation, multiple display setups, and compliance information.
	[EVGA X17 Gaming Mouse Quick Guide](#) A quick guide to setting up and using the EVGA X17 gaming mouse, including button layout, DPI settings, weight system, and compliance information.