

Manuals+

[Q & A](#) | [Deep Search](#) | [Upload](#)

manuals.plus /

› [WEELIAO](#) /

› [WEELIAO Intel Arc B580 Graphics Card User Manual](#)

WEELIAO B580

WEELIAO Intel Arc B580 Graphics Card User Manual

MODEL: B580

Brand: WEELIAO

Introduction

This manual provides essential information for the installation, operation, and maintenance of your WEELIAO Intel Arc B580 Limited Edition Graphics Card. Please read this manual thoroughly before installation to ensure proper setup and optimal performance. This graphics card is designed to deliver high-performance computing for gaming, content creation, and other demanding applications.

Product Features

The WEELIAO Intel Arc B580 Graphics Card is engineered with advanced technology to enhance your visual and computing experience. Key features include:

- **1440p Gaming:** Optimized for playing many of the latest games at 60+ FPS in 1440p resolution.
- **Faster Video Editing:** Equipped with a dual media transcoder, enabling up to 81% faster video exporting.
- **Smoother Experiences:** Achieves more fluid gameplay through Intel XeSS 2 upscaling technology and frame generation.
- **High Bandwidth Creation:** The advanced Xe media engine utilizes parallel cores to significantly speed up editing and content creation workflows.
- **Faster Responsiveness:** Features Intel Xe Low Latency (XeLL) for a hyper-connected gaming experience, reducing lag and input delays.
- **Powerful AI Engines:** Unlocks new AI experiences with up to 233 TOPS of AI engine performance, suitable for content creation, real-time AI chat, editing, and upscaled gaming.
- **8K Content Creation:** Seamlessly handles media creation in up to 8K resolution, accelerating professional workflows.



Figure 1: Front view of the WEELIAO Intel Arc B580 Limited Edition Graphics Card, featuring its dual-fan cooling system.



Figure 2: Exploded view illustrating the various internal components of the WEELIAO Intel Arc B580 graphics card, including the PCB, heatsink, and fan assembly.

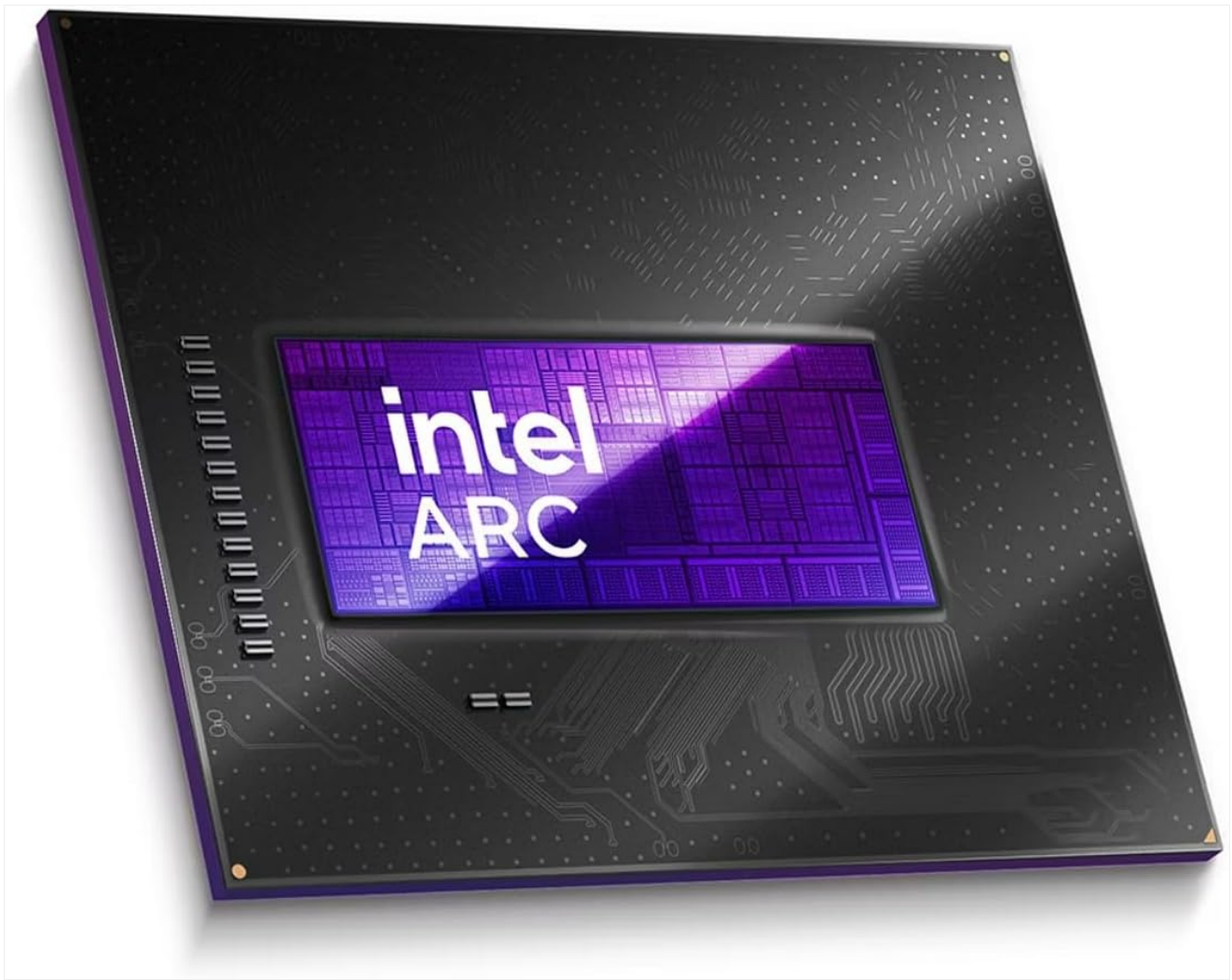


Figure 3: A detailed close-up of the Intel Arc GPU chip, which is the core processing unit of the graphics card.

Video 1: Official product video showcasing the design and features of the GUNNIR Intel Arc B580 12GB Photon OC Graphics Card, highlighting its cooling system and aesthetic.

Video 2: Product video demonstrating the Intel Arc B580 Limited Edition GPU, emphasizing its 12GB GDDR6 memory and DisplayPort 2.1/HDMI 2.1 connectivity.

System Requirements

Ensure your system meets the following requirements for optimal performance:

- **Graphics Coprocessor:** Intel Arc B580
- **Graphics RAM Size:** 12 GB GDDR6
- **Video Output Interface:** DisplayPort, HDMI
- **PCI-Express:** PCI-Express 4.0 x8 compatible motherboard with one x16 PCIe* slot.
- **Minimum PSU:** 450W or greater power supply recommended.
- **System Memory:** 8GB of system memory required. 16GB recommended.
- **Operating System:** Windows 10 (64-bit) or Windows 11 (64-bit).

**Installation and compatibility of Intel
ARC graphics cards**

Intel platform

Processor	Motherboard
13th and 12th generation intelCPU	Z790, B760, Z690, B660, and H610 chipsets
11th and 10th generation intelCPU	Z590, B560, H510, 7490, B460, and H410 chipsets
8th and 9th generation intelCPU	Z390, some brands B360, H310 chipsets

AMD platform

Processor	Motherboard
AMD Ruilong 7000 series	X670, B650, and A620 chipsets
AMD Ruilong 5000 series	X570, B550, and A520 chipsets
AMD Ruilong 3000 series	X470, B450, and A320 chipsets

Motherboard requirements

Make sure there are "SMA" or "RESIZE BAR" and Above4G pages in the motherboard BIOS! Make sure that the motherboard BIOS "CSM" is turned off or UEFI supported "option is turned on! Onda , jingyue, South China mainboard and this card are highly compatible. We do not recommend that you match them

Note: Please go to the official website of each mainboard brand to check whether the BIOS version has been updated or whether the motherboard manufacturer supports it

Power requirements

A770/A750/A580 (PHOTON/INDEX) solid Watt 550W or more, can provide hongshuang 8PIN power cord interface

A770(FLUX) real Watt 650W or more, can provide double 8PIN power cord interface

A380(PHOTON/INDEX) solid Watt 350W or more, can provide a single 8PIN power cord to connect Super

Chassis requirements

A770 FLUX is 300*125 * 51mm, accounting for 2.5. The slot weight is 2KG, which must be supported by the bracket

A750PHOTON is 300*118.5 * 50mm, accounting for 2.5 slots, optional bracket support

A750\A580\INDEX is 253*115 * 42mm. It occupies 2.0 slots

System requirements

Windows1022H1/22H2, support DX9, DX11

Figure 4: Detailed compatibility table for Intel Arc graphics cards, outlining processor, motherboard, power, chassis, and system requirements for both Intel and AMD platforms.

Hardware Installation

1. **Prepare Your System:** Turn off your computer and unplug the power cord.
2. **Open the Case:** Carefully open your computer case to access the motherboard.
3. **Locate PCIe Slot:** Identify an available PCI-Express 4.0 x16 slot on your motherboard. Remove the corresponding slot covers from the back of the PC case.
4. **Insert the Graphics Card:** Align the graphics card with the PCIe slot and press down firmly until it is fully seated. Ensure the retention clip locks into place.
5. **Secure the Card:** Use screws to secure the graphics card to the PC case.
6. **Connect Power:** If your graphics card requires an external power source, connect the appropriate power cables from your power supply to the card. The WEELIAO Intel Arc B580 typically requires one 8-pin power connector.
7. **Connect Display Cable:** Plug your display cable (HDMI or DisplayPort) into the graphics card.
8. **Close the Case:** Carefully close your computer case and reconnect the power cord.

Driver Installation

After installing the hardware, you must install the latest drivers for your graphics card:

1. **Power On:** Turn on your computer.
2. **Download Drivers:** Visit the official WEELIAO or Intel website to download the latest drivers for the Intel Arc B580 graphics card.
3. **Install Drivers:** Follow the on-screen instructions to complete the driver installation. It is recommended to perform a clean installation to avoid conflicts with previous drivers.
4. **Restart System:** Restart your computer after the driver installation is complete.

Operating Instructions

Your WEELIAO Intel Arc B580 graphics card is ready for use. For optimal performance in gaming and content creation, ensure your software and games are updated to support the latest graphics technologies, including Intel XeSS 2.

- **Gaming:** Adjust in-game settings to leverage 1440p resolution and enable XeSS 2 for enhanced frame rates and visual fidelity.
- **Content Creation:** Utilize the dual media transcoder for faster video rendering and editing. The AI engines can accelerate tasks in various creative applications.
- **Display Connectivity:** Use the DisplayPort 2.1 or HDMI 2.1 outputs for high-resolution and high-refresh-rate monitors.

Enough ports for different requirements



Figure 5: Rear view of the WEELIAO Intel Arc B580 graphics card, illustrating its one HDMI 2.1 port and three DisplayPort 2.1 ports for versatile display connectivity.

Maintenance

Regular maintenance helps ensure the longevity and optimal performance of your graphics card:

- **Dust Removal:** Periodically clean dust from the fans and heatsink using compressed air. Ensure the system is powered off and unplugged before cleaning.
- **Driver Updates:** Keep your graphics drivers updated to the latest version for performance improvements and bug fixes.
- **Temperature Monitoring:** Monitor GPU temperatures during heavy loads to ensure it operates within safe limits.

Troubleshooting

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

- **No Display:** Ensure all power cables are securely connected to the graphics card and the display cable is properly connected to both the card and the monitor. Verify the monitor input source.

- **Driver Issues:** Reinstall the graphics drivers using a clean installation method. Ensure you download the correct drivers for your operating system.
- **Performance Problems:** Check for background applications consuming resources. Ensure your system meets the minimum requirements and that your drivers are up to date. Monitor GPU temperatures for thermal throttling.
- **System Instability:** Verify that your power supply unit (PSU) meets the recommended wattage. Check for loose connections or incompatible components.

Specifications

Graphics Coprocessor	Intel Arc B580
Brand	WEELIAO
Graphics RAM Size	12 GB GDDR6
Video Output Interface	DisplayPort, HDMI
Graphics Processor Manufacturer	Intel
Item Model Number	B580
Package Dimensions	15 x 11 x 4 inches
Item Weight	4 pounds
Manufacturer	GUNNIR
Date First Available	December 16, 2024

Warranty and Support

Your WEELIAO Intel Arc B580 Graphics Card comes with a standard manufacturer's warranty. For detailed warranty terms and conditions, please refer to the warranty card included with your product or visit the official WEELIAO website. For technical support, driver downloads, and further assistance, please visit the WEELIAO support page or contact customer service.