

Manuals+

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

manuals.plus /

- › [ASUS](#) /
- › [ASUS Prime B650M-A II-CSM Motherboard User Manual](#)

ASUS PRIME B650M-A II-CSM

ASUS Prime B650M-A II-CSM Motherboard User Manual

Comprehensive instructions for installation, operation, and maintenance.

INTRODUCTION

This manual provides detailed instructions for the installation, configuration, and operation of your ASUS Prime B650M-A II-CSM Micro-ATX motherboard. Designed for AMD Ryzen 7000, 8000, and 9000 series processors, this motherboard offers robust performance and connectivity features. Please read this manual thoroughly before beginning the installation process.



Image: The ASUS Prime B650M-A II-CSM motherboard alongside its retail packaging, showcasing the product's design and branding.

SETUP AND INSTALLATION

Follow these steps carefully to ensure proper installation of your motherboard and its components.

1. CPU Installation (Socket AM5)

The ASUS Prime B650M-A II-CSM motherboard uses the AM5 socket, compatible with AMD Ryzen 7000, 8000, and 9000 series processors.

1. Locate the CPU socket on the motherboard.
2. Open the CPU retention lever and lift the load plate.
3. Carefully align the triangular mark on the CPU with the corresponding mark on the socket.
4. Gently place the CPU into the socket without applying force.
5. Close the load plate and secure it with the retention lever.

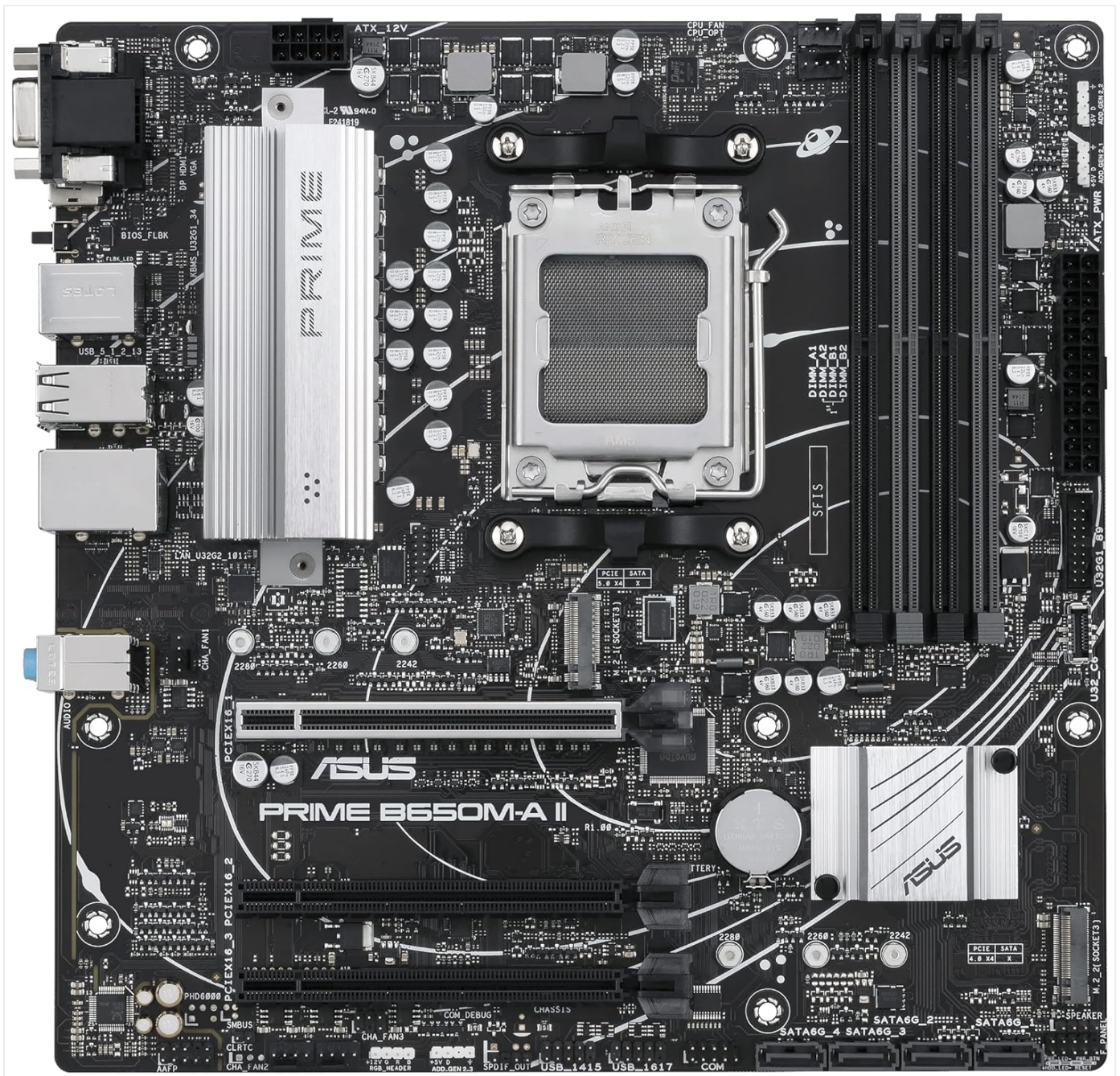


Image: A detailed top-down view of the ASUS Prime B650M-A II-CSM motherboard, highlighting the AM5 CPU socket and surrounding components.

2. Memory Installation (DDR5)

This motherboard supports DDR5 memory modules. Refer to your motherboard's QVL (Qualified Vendor List) for compatible memory.

1. Open the clips at both ends of the DIMM slot.
2. Align the notch on the DDR5 memory module with the key in the DIMM slot.
3. Press down firmly on both ends of the memory module until the clips snap into place.

3. Storage Installation (M.2 and SATA)

The motherboard features M.2 PCIe 5.0 slots and SATA 6Gb/s ports for storage devices.

- **M.2 SSD:** Locate the M.2 slots. Remove the M.2 screw or stand-off. Insert the M.2 SSD into the slot at an angle, then gently push it down and secure it with the screw or stand-off.
- **SATA Drives:** Connect SATA data cables from your storage devices (HDDs/SSDs) to the SATA 6Gb/s ports on the motherboard. Connect SATA power cables from your power supply to the drives.



Image: A diagram of the motherboard indicating the locations of the PCIe 5.0 M.2 slots, crucial for high-speed storage.

4. Power Connections

Connect the main 24-pin ATX power connector and the 8-pin CPU power connector from your power supply to the corresponding ports on the motherboard.

5. Front Panel Connections

Connect your PC case's front panel headers (power button, reset button, HDD LED, power LED, USB ports, audio jacks) to the corresponding pins on the motherboard. Refer to the motherboard manual for exact pin layouts.

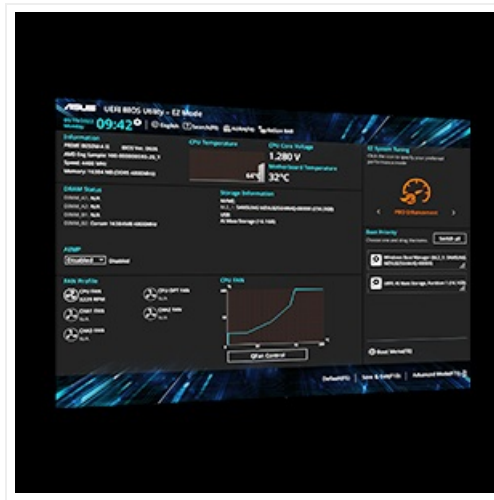


Image: The ASUS UEFI BIOS Utility in EZ Mode, providing an overview of system status and easy access to common settings.

2. Driver Installation

After installing your operating system, install the necessary drivers for the motherboard components.

- Use the provided support DVD or download the latest drivers from the ASUS support website.
- Install chipset drivers, LAN drivers, audio drivers, and any other peripheral drivers.

3. ASUS Control Center Express (ACCE)

ASUS Control Center Express (ACCE) is a centralized IT management software designed to simplify endpoint management for businesses. Download and install ACCE from the ASUS website for enhanced system control and monitoring.

4. Aura Sync RGB Lighting

The motherboard features onboard Addressable Gen 2 headers and an Aura RGB header for connecting RGB LED strips. These can be synchronized with other Aura Sync-capable hardware using the ASUS Aura Sync software.



Image: The ASUS Prime B650M-A II-CSM motherboard, illustrating its compatibility with Aura Sync RGB lighting for customizable aesthetics.

MAINTENANCE

1. BIOS Updates

Regularly updating your motherboard's BIOS is crucial for system stability, performance improvements, and compatibility with new hardware.

- Always download BIOS updates directly from the official ASUS support website for your specific model.
- Use the BIOS Flashback feature or the EZ Flash utility within the BIOS for safe updating.
- Ensure a stable power supply during the update process to prevent data corruption.

2. Cleaning

Keep your motherboard and PC case free from dust to ensure optimal cooling and longevity.

- Power off and unplug your computer before cleaning.
- Use compressed air to remove dust from heatsinks, fans, and other components.
- Avoid using liquid cleaners directly on the motherboard.

TROUBLESHOOTING

If you encounter issues, consider the following common troubleshooting steps:

- **No Power/No Boot:**
 - Verify all power cables (24-pin ATX, 8-pin CPU) are securely connected.
 - Ensure the power supply is switched on.
 - Check front panel connections for power button.
 - Test with minimal components (CPU, one RAM stick, GPU if no integrated graphics).
- **Display Issues:**
 - Ensure monitor cables are securely connected to the correct output (motherboard or discrete GPU).
 - If using integrated graphics, ensure your CPU supports it.
- **System Instability/Crashes:**
 - Update BIOS to the latest version. Older BIOS versions might have stability issues or over-voltage concerns with certain CPUs.
 - Check RAM seating and test memory modules individually.
 - Monitor CPU and system temperatures.
- **Peripheral Not Detected:**
 - Ensure drivers are installed.
 - Check physical connections.
 - Test the peripheral in a different port or system if possible.

SPECIFICATIONS

Key technical specifications for the ASUS Prime B650M-A II-CSM motherboard:

Feature	Specification
Brand	ASUS
Model Name	PRIME B650M-A II-CSM
CPU Socket	Socket AM5
Compatible Processors	AMD Ryzen™ 7000, 8000, 9000 Series
Chipset Type	AMD B650
RAM Memory Technology	DDR5
Memory Speed	Up to 4400 MHz (OC support for higher speeds)
M.2 Slots	2 (PCIe 5.0 support)
Ethernet	Realtek 2.5Gb Ethernet
USB Ports	USB 3.2 Gen 2, USB 3.2 Gen 1 Type-C (front header), USB 2.0
Video Outputs	DisplayPort, HDMI®, VGA
Form Factor	Micro-ATX

Feature	Specification
Dimensions (LxWxH)	11 x 2.7 x 11 inches
Item Weight	2.65 pounds

WARRANTY AND SUPPORT

For detailed warranty information, please refer to the warranty card included with your product or visit the official ASUS website.

For technical support, driver downloads, and further documentation, please visit the ASUS support page for your model:[ASUS Support Website](#)

A PDF version of the user guide is also available[Download User Guide \(PDF\)](#)



© 2023 ASUS. All rights reserved. Information in this manual is subject to change without notice.

Related Documents - PRIME B650M-A II-CSM

	ASUS PRIME B650M-A WIFI II Motherboard Quick Start Guide A concise, SEO-optimized HTML guide for installing and setting up the ASUS PRIME B650M-A WIFI II motherboard. Covers CPU, RAM, storage, expansion cards, system panel connectors, power, I/O devices, and initial system startup.
	ASUS PRIME B650M-A WIFI Motherboard User Manual Comprehensive user manual for the ASUS PRIME B650M-A WIFI motherboard, detailing installation, configuration, BIOS, RAID support, specifications, and safety precautions.
	ASUS PRIME B650M-A WIFI II Motherboard User Manual Comprehensive user manual for the ASUS PRIME B650M-A WIFI II motherboard, detailing installation, setup, BIOS configuration, and technical specifications.



[\[pdf\]](#)

ASUS PRIME B650M-A II-CM - Motherboard micro ATX - Socket AM5 - AMD B650 Chipsatz - USB 3.2 Gen 1, USB 3.2 Gen 2, USB-C 3.2 Gen 1 - 2,5 Gigabit LAN - Onboard-Grafik (CPU erforderlich) HD Audio (3-Kanal)					
Gruppe Hersteller Hersteller Art. Nr. LAN/CPU	Mainboards ASUS 90MB16M-M0GATX 10181023543				
Beschreibung ASUS PRIME B650M-A II-CM - Motherboard - micro ATX - Socket AM5 - AMD B650 Chipsatz - USB 3.2 Gen 1, USB 3.2 Gen 2, USB-C 3.2 Gen 1 - 2,5 Gigabit LAN - Onboard-Grafik (CPU erforderlich) - HD Audio (3-Kanal)					
Haupth Merkmale					
Produktbeschreibung Produkttyp Chipsatz Prozessorsockel Powermanagement Netz-BMI-Schalter Unterstützte RAM Unterstützte Speicherlösungen Audio LAN	ASUS PRIME B650M-A II-CM - Motherboard - micro ATX - Socket AM5 - AMD B650 Chipsatz - micro ATX AMD B650 1 x Socket AM5 Power-Unterstützt Ryzen™ 7000 Serie 101 GB 4 DIMM-Steckplätze - DDR5, non-ECC, ECC, on- oder ECC-unterstützt 4 x SATA-600 (RAID), 2 x M.2 2 x USB 3.2 Gen 1 + 2 x USB 3.2 Gen 1 + 4 x USB 3.2 (1 x USB-C 3.2 Gen 1 + 1 x USB 3.2 Gen 1 + 2 x USB 2.0 über eine interne Schaltung) HD Audio (3-Kanal) 2,5 Gigabit Ethernet				
Technische Spezifikationen, Leistungsdaten und weitere Informationen.					

[\[pdf\]](#)

Datenblatt Asus PRIME B650M A II CSM Carte mère Socket PC AMD AM5 Facteur de forme détails

Micro ATX Chipset la carte m Conrad Electronic Suisse fiche technique 3045518 asus prime b650m a ii

csm mere socket pc amd am5 facteur details micro atx chipset asset conrad media10 add 160267 c1

895864570DS00 |||

ASUS **PRIME B650M-A II-CSM** Motherboard - micro ATX - Socket AM5 AMD B650

Chipsatz - USB 3.2 Gen 1, USB 3.2 Gen 2, USB-C 3.2 Gen 1 - 2.5 Gigabit LAN -

Onboard-Grafik CPU erforderlich HD Audio 8-Kanal Gruppe Hersteller Hersteller Art.

Nr. EAN/UPC Mainboards ASUS 90MB1EH0-M0EAYC 4711387025543 Bes...

lang:de score:45 filesize: 825.18 K page_count: 1 document date: 2024-04-23

[illegible]

[\[pdf\]](#)

ASUS PRIME B650M A II CSM AMD B650 Socket AM5 micro ATX Marchio Codice prodotto 90MB1EH0

M0EAYC Nome del PRIME 90mb1eh0 m0eayc leaflet multimedia yeppon it products |||

ASUS **PRIME B650M-A II-CSM** AMD B650 Socket AM5 micro ATX Marchio : ASUS

Nome del prodotto : **PRIME B650M-A II-CSM** Codice prodotto: 90MB1EH0-M0EAYC

ASUS PRIME B650M-A II-CSM. Produttore processore: AMD, Presa per processore:

Socket AM5, Processori compatibili: AMD Ryzen 7000 Series. Tipi di memoria ...

lang:en score:43 filesize: 364.99 K page_count: 3 document date: 2024-12-22

OFFICE Partner
Ihre Business-Expansionspartnerin

Office Partner GmbH · Schwaninger 35 · 48713 Gutzler
Fax: 025-42 95 387-52
shop@office-partner.net · www.office-partner.net

[illegible]

[\[pdf\]](#)

Datenblatt en ASUS PRIME B650M A II CSM Mainboard Sockel AMD AM5 Ryzen 7000 mATX DDR5

PCIe 5.0 25GB Ethernet DisplayPort HDMI ASUS90MB1EH0 M0EAYC cdn assets office partner de

media 8a e8 91 |||

Produktdatenblatt ASUS **PRIME B650M-A II-CSM** Motherboard - micro ATX - Socket

AM5 AMD B650 Produktbeschreibung: Gruppe: Hersteller: Hersteller Artikel Nr: EAN:

ASUS **PRIME B650M-A II-CSM** Motherboard - micro ATX - Socket AM5 AMD B650

Chipsatz - USB 3.2 Gen 1, USB 3.2 Gen 2, USB-C 3.2 Gen 1 - 2.5 Gig...

lang:de **score:41** filesize: 224.17 K page count: 3 document date: 2024-1



[pdf]

Ficha Técnica lo que necesitas en tecnología y productos de cómputo MCAShop Chipset tarjeta madre AMD B650 Canales salida audio 7 1 canales ASUS PRIME B650M A II CSM Fabricante procesador Socket de producto mcashop mx descargar 522181 srsltid AfmBOooXwRM7p4QbJZhAWFJjJwWuQ5pDsQqjrjyL59CmlQEzxafDCrPB |||

Todo lo que necesitas en tecnologa y productos de cmputo. Tarjeta Madre ASUS **PRIME B650M-A II-CSM**, AMD, Enchufe AM5, AMD RyzenTM 5, AMD Ryzen 7 7th Gen, AMD Ryzen 9 7th Gen, Enchufe AM5, DDR5-SDRAM, 128 GB ASUS **PRIME B650M-A II-CSM**, AMD, Enchufe AM5, AMD Ryzen 7000 Series, Enchufe AM5, DDR5SDRAM, 12... lang:es score:41 filesize: 10.09 K page_count: 4 document date: 2025-07-26



[pdf]

Ficha Técnica lo que necesitas en tecnología y productos de cómputo MCAShop Chipset tarjeta madre AMD B650 Canales salida audio 7 1 canales ASUS PRIME B650M A II CSM Fabricante procesador Socket de producto mcashop mx descargar 522181 srsltid AfmBOood9MPgq3nT0cj7A1OJiGCUJl1aRzKL9LElj1 JdnPnSEaQtyuo |||

Todo lo que necesitas en tecnologa y productos de cmputo. Tarjeta Madre ASUS **PRIME B650M-A II-CSM**, AMD, Enchufe AM5, AMD RyzenTM 5, AMD Ryzen 7 7th Gen, AMD Ryzen 9 7th Gen, Enchufe AM5, DDR5-SDRAM, 128 GB ASUS **PRIME B650M-A II-CSM**, AMD, Enchufe AM5, AMD Ryzen 7000 Series, Enchufe AM5, DDR5SDRAM, 12... lang:es score:41 filesize: 10.09 K page_count: 4 document date: 2025-06-24



[pdf]

Ficha Técnica lo que necesitas en tecnología y productos de cómputo MCAShop Chipset tarjeta madre AMD B650 Canales salida audio 7 1 canales ASUS PRIME B650M A II CSM Fabricante procesador Socket de producto mcashop mx descargar 522181 srsltid AfmBOopk05kdvUArraJjBLAQVJN03Tlb430vzehv6tOVS4jL2CP bW7j |||

Todo lo que necesitas en tecnologa y productos de cmputo. Tarjeta Madre ASUS **PRIME B650M-A II-CSM**, AMD, Enchufe AM5, AMD RyzenTM 5, AMD Ryzen 7 7th Gen, AMD Ryzen 9 7th Gen, Enchufe AM5, DDR5-SDRAM, 128 GB ASUS **PRIME B650M-A II-CSM**, AMD, Enchufe AM5, AMD Ryzen 7000 Series, Enchufe AM5, DDR5SDRAM, 12... lang:es score:41 filesize: 10.09 K page_count: 4 document date: 2025-07-26

[illegible][illegible][illegible]

[\[pdf\]](#)

ASUS Prime B650M A II CSM AM5 VGA DP HDMI USB3 2 DDR5 ARGB mATX osnovna plošča

ponudba izdelka Podnožje Vezni nabor AMD B650 format filter maticne Micro ATX Pomnilnik 4x DIMM

max do 6400 OC maks 128 GB UDIMM Razširitvena mesta asus prime h510m c csm lga1200 matx ddr4

plosca altstore si 1 |||

Datum: 24.06.2025 Altstore.si - Gigatron d.o.o. Vosnjakova 5, 1000 Ljubljana Davčna

st.: si20355289 Telefon: 040 426 026 E-mail: prodaja alt-store.si WWW:

www.altstore.si ASUS Prime B650M-A II-CSM AM5 VGA DP HDMI USB3.2

DDR5 ARGB mATX osnovna plosca Kategorija: Osnovne plosce Dobavljivost: pred...

lang:hr score:38 filesize: 410.6 K page_count: 2 document date: 2025-06-24

[\[pdf\]](#)

ASUS PRIME B650M A II CSM AMD B650 Socket AM5 micro ATX Apr 30 2025 · Ready for Ryzen™

7000 Series Desktop Processors Ultrafast Connectivity M.2 PCIe 5.0 Realtek 5Gb Ethernet 90MB1EH0

M0EAYC leaflet data systems fi 4548476 EN 1 srsItid AfmBOookrDn0vQTQGaj4Qr6 BB8v

2auMAS7rMxR tj4rCQSo005oDo5 |||

ASUS PRIME B650M-A II-CSM AMD B650 Socket AM5 micro ATX Brand : ASUS

Product name : **PRIME B650M-A II-CSM** Product code: 90MB1EH0-M0EAYC - AMD

AM5 Socket: Ready for AMD Ryzen™ 7000 Series Desktop Processors - Ultrafast

Connectivity: M.2 PCIe 5.0, Realtek 2.5Gb Ethernet, USB 3.2 Gen 2 ports, front ...

lang:en **score:38** filesize: 368.27 K page_count: 3 document date: 2025-07-02

[\[pdf\]](#) Specifications Datasheet Borchure

ASUS 90MB1EH0 M0EAYC PRIME B650M A II CSM AMD B650 Socket AM5 micro ATX Brochure

product datasheet specifications MPN Icecat Ready for Ryzen™ 7000 Series Desktop Processors

Ultrafast Connectivity M 2 PCIe 5 0 Realtek 5Gb Ethernet leaflet data systems fi 4548476 EN 1 srsrtid

AfmBOoqKwDyuau93i WHIEL0beDKO ypSz9kUcCbXjd7CK5xa8F5sl2j |||

ASUS **PRIME B650M-A II-CSM** AMD B650 Socket AM5 micro ATX Brand : ASUS

Product name : **PRIME B650M-A II-CSM** Product code: 90MB1EH0-M0EAYC - AMD

AM5 Socket: Ready for AMD Ryzen™ 7000 Series Desktop Processors - Ultrafast

Connectivity: M.2 PCIe 5.0, Realtek 2.5Gb Ethernet, USB 3.2 Gen 2 ports, front ...

lang:en score:37 filesize: 369.91 K page_count: 3 document date: 2025-08-04

ASUS



ExpressVPN

Renforcez votre sécurité, protégez votre vie privée

Obtenez un essai gratuit exclusif de 90 jours d'ExpressVPN pour l'achat d'une sélection de produits ASUS



ASUS

*voir conditions

Obtenez un essai gratuit exclusif de 90 jours d'ExpressVPN pour l'achat d'une sélection de produits ASUS

Comment ça marche ?

- Achetez un produit ASUS éligible entre le 24 janvier 2024 et le 21 mai 2024 chez un revendeur participant
- Saisissez les informations requises dans le formulaire de participation entre le 30 janvier 2024 et le 31 mai 2024 sur le site de la promotion
<https://www.asus.com/fr/register/official-event/expressvpn>
- Après une checke vérification, vous recevrez un email de confirmation ASUS avec un lien ExpressVPN unique pour activer votre essai gratuit sous 3 jours ouvrables

"Le client doit être un nouvel utilisateur sans aucun abonnement avec ExpressVPN pour bénéficier cette offre."

lang:fr score:18 filesize: 251.2 K page_count: 9 document date: 2024-01-19

lang:fr score:18 filesize: 251.37 K page_count: 9 document date: 2024-03-08