

# ASUS | BUSINESS



## Programa Kit Digital



Ultimate Portability

Productive Performance

Trustworthy Reliability



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## 1 - Desglose de las evidencias fase 1 para el caso del ordenador portátil

- 1.1 - Información del fabricante y/o entidades certificadoras con las características técnicas de los dispositivos hardware (portátil o dispositivo de sobremesa y monitor) incluyendo certificaciones energéticas y de robustez que permitan acreditar el cumplimiento de los requisitos de Hardware y Software de esta categoría

### ASUS ExpertBook B3 B3604CM ExpertBook Series



## B3604CM

### Specification

<b>Marca, modelo</b>	ASUS B3604CM
<b>Model Name</b>	B3604CMA-Q90698X
<b>Part No</b>	90NX0731-M00TJ0
<b>Procesador</b>	Intel® Core™ Ultra 5 Processor 125U 1.3 GHz (12MB Cache, up to 4.3 GHz, 12 Cores) Fecha de lanzamiento - Q4'23
<b>Neural processor</b>	Intel® AI Boost NPU
<b>Rendimiento, incluyendo Passmark</b>	17.186 puntos
<b>Memoria RAM</b>	1 x 16GB DDR5-5600MT/s 2x DDR5 SO-DIMM slots(una ocupada)
<b>Almacenamiento</b>	512GB M.2 2280 NVMe™ PCIe® 4.0 SSD 1x M.2 2230 PCIe 4.0x4 1x M.2 2280 PCIe 4.0x4(Ocupada)
<b>Sistema Operativo</b>	Windows 11 Pro 64 Bits
<b>Tarjeta Gráfica</b>	Intel® Graphics
<b>Tarjeta Sonido</b>	Audio de Dirac Altavoces incorporados Micrófono de matriz incorporado
<b>Conectividad inalámbrica</b>	Wi-Fi 6(802.11ax) (Dual band) 2*2 + Bluetooth® 5.2 2x USB 3.2 Gen 2 Type-A 2x Thunderbolt™ 4, compliant con USB4, soporta display(DP) / power delivery
<b>Interfaces de entrada/salida</b>	1x HDMI 2.1 TMDS 1x 3.5mm Combo Audio Jack (auriculares y micrófono) 1x RJ45 Gigabit Ethernet Lector de tarjetas inteligentes integrado que cumple el estándar ISO-7816
<b>Tamaño panel</b>	16"
<b>Retroiluminación</b>	LED Retroiluminado
<b>Brillo</b>	300nits
<b>Resolución</b>	WUXGA (1920 x 1200) 16:10
<b>Reflejos</b>	Pantalla Antirreflejos
<b>IPS</b>	SI
<b>Ratón/ Touchpad</b>	Touchpad
<b>Webcam</b>	Cámara HD 720p Con persiana de privacidad
<b>Batería</b>	50WHrs, 351P, 3-celdas Li-ion
<b>AC Adaptador</b>	TYPE-C, 65W AC Adapter, Output: 20V DC, 3.25A, 65W, Input: 100~240V AC 50/60Hz universal



## B3604CM

<b>Certificaciones</b>	EPEAT Gold
	Energy star 8.0
	CE
	RoHS
	TCO Certified
<b>Certificado de robustez</b>	US MIL-STD 810H military-grade standard
<b>Seguridad</b>	BIOS/UEFI Secure Mode (Secure Boot enable/disable)
	Trusted Platform Module (TPM) 2.0
	Huella dactilar
	BIOS Booting User Password Protection
	BIOS setup user password
	Computrace ready from BIOS
	HDD User Password Protection and Security
	Kensington Nano Security Slot™(6x 2.5mm)
<b>Dimension (WxHxD)</b>	35.80 x 25.43 x 2.03 cm
<b>Peso (con Bateria)</b>	1.85 kg

### 1.1.1 - Fecha lanzamiento procesador

Puede consultar la fecha de lanzamiento del procesador desde la propia WEB del fabricante:

<https://www.intel.la/content/www/xl/es/products/sku/237330/intel-core-ultra-5-processor-125u-12m-cache-up-to-4-30-ghz/specifications.html>



### Información complementaria

Estado	Launched
Fecha de lanzamiento	Q4'23





1.1.2 - Certificado Energy Star

Puede consultar el certificado Energy Star desde la propia WEB de Energy Star:

<https://www.energystar.gov/productfinder/product/certified-computers/details/3354366>

**ENERGY STAR CERTIFIED Computers**

### ASUS - B5604CM Series : B5604CM

Specifications	
ENERGY STAR Unique ID:	3354366
Brand Name:	ASUS
Model Name:	B5604CM Series
Model Number:	B5604CM
Type:	Notebook
Category 2: Processor Brand:	Intel
Category 2: Processor Name:	Ultra 7
Category 2: Base Processor Speed Per Core (GHz):	1.4
Category 2: Physical CPU Cores (count):	14
Category 2: System Memory (GB):	64.0
Category 2: Default Low-power Mode:	Modern Standby
Category 2: Long Idle Power Used for Sleep Mode:	Yes
Category 2: Off Mode (watts):	0.4
Category 2: Sleep Mode (watts):	1.2
Category 2: Long Idle (watts):	1.2
Category 2: Short Idle (watts):	5.9
Category 2: Base TEC Allowance (kWh):	14
Category 2: Functional Adder Allowances (kWh):	33.8
Category 2: TEC of Model (kWh):	18.9
Notebooks, Desktops, Integrated Computers, Slate/Tablets, Two-in-one Notebooks, and Portable All-in-ones Category for TEC (Typical Energy Consumption) Criteria:	2
Category 2: Operating System Name:	Windows 11 Pro
Sleep Mode Default Time Upon Shipment (min.):	5
Display Sleep Mode Default Time Upon Shipment (min.):	5
Ethernet Capability:	Yes
Touch Screen:	Yes
Date Available On Market:	2024-02-05
Date Certified:	2023-12-27
Markets:	United States, Switzerland, Taiwan, Japan, Canada
ENERGY STAR Certified:	Yes

**Additional Model Information**

B5604CM Series: B3604CM; B5604CM Series,B3604CM\_L; B5604CM Series,B5604CM\_L





### 1.1.3 - Certificado EPEAT GOLD

Puede consultar el certificado EPEAT GOLD desde la propia WEB de EPEAT:

<https://www.epeat.net/product-details/d79d1ebcac844236a23d289d9bac4c6c?backUrl=%252Fcomputers-and-displays-search-result%252Fpage-1%252Fsize-25%253FproductName%253DB3604CM>

GLOBAL ELECTRONICS COUNCIL

Benefits Calculators Product Finder Announcements About EPEAT Contact Us Login

RETURN TO SEARCH

## ASUS B3604CM

Product Summary:

Product Type:	Notebook
Registered In:	Spain
Manufacturer:	ASUSTeK Computer Inc.
EPEAT Tier:	Gold
Registration Date:	2024-03-31
Product Status:	Active

Universal Product Code(s): 197105417816, 197105452602, 197105484849, 197105500044, 197105500096, ...  
View all (16)

All unique product identifiers existing for this product may not be listed here. If the unique product identifier you are looking for is not listed, please contact EPEAT at [EPEAT@GEC.org](mailto:EPEAT@GEC.org).

EXPORT PRODUCT SUMMARY





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1.1.4 - Certificado TCO



# CERTIFICATE

## TCO Certified, generation 9 for notebooks



**Brand name:** ASUS  
**Sales name:** ExpertBook B3 (B3604)  
**Certification date:** 2024-03-27  
**Expiry date:** 2026-03-27

### Toward sustainable IT products

TCO Certified is the world-leading sustainability certification for IT products. It is an easy-to-use tool that helps you get environmental and social sustainability right. Criteria are mandatory, tough, and apply globally. Compliance is always independently verified.

For more information, visit [tccertified.com](https://tccertified.com).

No. N924030440

**Emma Hagrot**  
Certification process  
TCO Development

This certificate confirms that a sample of the certified product, as stated herein, has been tested and approved as to its compliance with the criteria document valid at the time of the laboratory test. The certified product may, subject to the use of the unique combination of brand name, type/model name and sales name as stated in this certificate, be marked and sold with the TCO Certified label in accordance with the agreement.







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Appendix to certificate No. N924030440



Brand name: ASUS  
 Sales name(s):  
 ExpertBook B3 (B3604)  
  
 Separate power supply: Yes, Class 1  
 Operating mode sound level: 3.1 B



**26%**  
 Recycled plastic



**2.2 kg**  
 Total weight of product



**Energy consumption:**  
 For energy consumption and yearly emissions, visit [tcocertified.com/product-finder/](https://tcocertified.com/product-finder/)



**Aspect ratio:** 16:10  
**Panel size:** 16 in  
**Min. resolution width:** 1920 px  
**Min. resolution height:** 1200 px



**Battery longevity:**  
 The main battery in this product is tested to withstand at least: **300** full discharges until it reaches 80% of the initial capacity



**Durability**  
**Drop test height:** 45 cm  
**High temp operational:** 40° C  
**Low temp operational:** -20° C

**Model names(s)**

B3604C, B3604CV, B3604CVA, P3654CVA, PX664CVA, B3604CVF, P3654CVF, PX664CVF, B3604CMA, B3604CM, P3654CMA, PX674CMA, B3604CM\_L, B3604CMA\_L

**Model name type key(s)**

1st \*: N/A  
 2nd \*: N/A

Emma Hagrot  
 Certification process  
 TCO Development





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Appendix to certificate No. N924030440



Panels:

BOE NV160WUM-N43, Innolux N160JCA-EEL, BOE NE160QDM-NX2



Batteries:

Simple C31N2005, Celxpert C31N2205



Adapters:

PI AD10380, Chicony A19-065N3A, Chicony A23-065N1A, Delta ADP-90RE B

Emma Hagrot  
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TCO Development





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1.1.5 - Certificado Robustez MIL STD 810H



ASUS MIL-STD 810H Test Report - B3604CM

Test Category	Test Method	MIL-STD 810H Test Parameters	Test Result
Air-bulk Storage/ Air Transport	Method 509.5-Procedure I	Test Process: Equipment location altitude of 60,000ft. Temperature: -20°C Duration: 12 hour Unit is non-operational during test.	Pass
Air-bulk Operational Air Carriage	Method 509.4-Procedure I	Test Process: Equipment location altitude of 15,000ft. Temperature: 5°C and 40°C Duration: 12 hour (5°C) and 12 hour (40°C) Unit is operational during test.	Pass
High Temperature Operational (Hot Dry)	Method 501.7-Procedure I (A1)	Temperature: 32-49°C cycling temperature exposure Table 501.7.8 Procedure: High temperature cycles, climate category A1 Hot Dry Unit is operational during test. Duration: 3 day exposure (3 X 24 hr. cycles)	Pass
High Temperature Storage and Transit (Hot Dry)	Method 501.7-Procedure I (A1)	Temperature: 33-71°C cycling temperature exposure Table 501.7.8 Procedure: High temperature cycles, climate category A1 Hot Dry Unit is non-operational during test. Duration: 3 day exposure (3 X 24 hr. cycles)	Pass
High Temperature Operational (Base Hot)	Method 501.7-Procedure I (A2)	Temperature: 35-43°C cycling temperature exposure Table 501.7.8 Procedure: High temperature cycles, climate category A2 - Base Hot Humidity: 5-44% Unit is operational during test.	Pass
High Temperature Storage and Transit (Base Hot)	Method 501.7-Procedure I (A2)	Temperature: 35-43°C cycling temperature exposure Table 501.7.8 Procedure: High temperature cycles, climate category A2 - Base Hot Humidity: 5-44% Unit is non-operational during test. Duration: 3 day exposure (3 X 24 hr. cycles)	Pass
Low Temperature Storage and Transit (Basic climatic)	Method 502.7-Procedure I (C1)	Temperature: 25- -32°C Low temperature cycles, Table IX, Basic climatic, C1 Unit is non-operational during test. Duration: 3 day exposure (3 X 24 hr. cycles)	Pass
Low Temperature Operational (Basic climatic)	Method 502.7-Procedure II (C1)	Temperature: 25- -32°C Low temperature cycles, Table IX, Basic climatic, C1 Unit is operational during test. Duration: 3 day exposure (3 X 24 hr. cycles)	Pass
Low Temperature Storage and Transit (Cold climatic)	Method 502.7-Procedure I (C2)	Temperature: 37- -46°C Low temperature cycles, Table XI, Cold climatic, C2 Wind speed less than 5m/s (11 mph) Unit is non-operational during test. Duration: 3 day exposure (3 X 24 hr. cycles)	Pass
Low Temperature Operational (Cold climatic)	Method 502.7-Procedure II (C2)	Temperature: 37- -46°C Low temperature cycles, Table XI, Cold climatic, C2 Wind speed less than 5m/s (11 mph) Unit is operational during test. Duration: 3 day exposure (3 X 24 hr. cycles)	Pass
Temperature Shock	Method 503.1-Procedure I (C)	Duration: 1 Hour / Three cycles Temperature: -11 to 71°C Unit is non-operational during test.	Pass
Humidity Approved Cycle	Method 507.6-Procedure II	Duration: 10 Days Temperature: 30°C and 60°C Humidity: 95% RH constant Unit is non-operational during test.	Pass
Sediment Dust	Method 503.3-Procedure II	Particle density: 1.1 +/- 0.2g/cm <sup>3</sup> Air velocity: 28m/s Operating temperature of 40°C	Pass
Vibration	Method 514.8-Procedure I (Table 514.8C-1)	Frequency: 5-500Hz, Vertical rms = 1.0g Transverse rms = 0.25g, Longitudinal rms = 0.25g Test time: 60 minutes per axis (US highway truck vibration excluded)	Pass
	Method 514.8-Procedure I (Table 514.8C-2)	Frequency: 5-500Hz, Vertical rms = 0.8g Transverse rms = 1.0g, Longitudinal rms = 2.5g Test time: 32 minutes per axis	Pass





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Shock	Method 514.8 - Procedure I (DIN EN 14803 V1)	Frequency 5-500Hz, vertical rms - 2.24g Transverse rms - 1.45g, Longitudinal rms - 1.30g Test Time: 40 minutes per axis	Pass
	Method 516.8 - Procedure I	Functional Shock Operational Shock (as instructed for a total of 75 shocks, 40 Gs peak, 11 ms) Transportation shock: On road (5000Kms)	Pass
	Method 535.8 - Procedure II	Amplitude: 53-7.0 G-RM, Number of Shocks: 3-42 times Pulse Duration: 11ms Terminal Rise Sawtooth Non Off Package	Pass
	Method 516.8 - Procedure II	Fragility Non-operational Shock (as instructed for a total of 10 shocks 30-50 Gs peak, Trapezoidal pulse / 20ms, 10 Green stage	Pass
	Method 516.8 - Procedure IV	Turned On Package / 220cm / 20 Drop	Pass
	Method 516.8 - Procedure VI	Basic Handling Drop Height - 100 times Unit is operational during test	Pass
Vibration	Method 524.1 - Procedure I	Rapid Temperature Change Temperature: 30°C and -10°C Humidity: 95% RH Dwell: 1 Hour / 1 Three cycles	Pass
	Method 520.1 - Procedure I (Type I)	Environmental Vibration 1-33 Hz / 2 hours	Pass

\*The testing regime includes the requirements of military-grade standards, and varies depending on device. MIL-STD-810 testing is conducted on selected ASUS products only. Note that the MIL-STD-810 testing helps to ensure the quality of ASUS products but does not indicate a particular fitness for military use. The test is performed under laboratory conditions. Any damage caused by attempts to replicate these test conditions would be considered accidental, and would not be covered by the standard ASUS warranty. Additional coverage is available with ASUS Premium Care.





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1.1.6 - Certificado CE

UE Declaración de Conformidad



Nosotros, los abajo firmantes,

Fabricante: ASUSTeK COMPUTER INC.

Representante autorizado en Europa: ASUS COMPUTER GmbH  
 Dirección, Ciudad: HARKORT STR. 21-23, 40880 RATINGEN  
 País: GERMANY



declaramos, bajo nuestra exclusiva responsabilidad, que el siguiente aparato:

Nombre del aparato: Notebook PC  
 Nombre del modelo: B3604CM

Información adicional: ANNEX I

El objeto de la declaración descrita anteriormente es conforme con la legislación de armonización pertinente de la Unión:

Equipos Radioeléctricos Directiva - 2014/53/EU

- Artículo 3.1a  
EN 50566:2017, EN 62209-2:2010/A1:2019, EN 62368-1:2014/A11:2017
- Artículo 3.1b  
EN 301 489-1 V2.2.3, EN 301 489-17 V3.2.4, EN 301 489-3 V2.1.1, EN 301 489-52 V1.2.1, EN 55032:2015/A11:2020, EN 55035:2017/A11:2020, EN 61000-3-2:2014, EN 61000-3-3:2013, EN 61000-3-3:2013/A2:2021, EN IEC 61000-3-2:2019/A1:2021
- Artículo 3.2  
EN 300 328 V2.2.2, Draft EN 303 687 V0.0.13, EN 300 330 V2.1.1, EN 300 440 V2.1.1, EN 301 893 V2.1.1

Examen UE de tipo :  
 Número Certificado : 1622-RED-464550  
 Número de organismo Notificado : 1622  
 Organismo Notificado : Nemko

Clase de Equipos de Radio  
 Clase 1

Directiva Diseño Ecológico - 2009/125/EC  
 617/2013/EU

Directiva RoHS - 2011/65/EU  
 2015/863/EU, EN IEC 63000:2018

Firma:

S.y. Shian, Director Ejecutivo/CEO

Lugar de emisión:

Taipei

Fecha de emisión:

22/02/2024

1 of 1





1.1.7 - Certificado ROHs



ASUSTEK COMPUTER INC.

No.15, LiDe Rd., Beitou Dist., Taipei 11259, Taiwan  
Tel. 886-2-2894-3447 - <https://www.asus.com>

April 10, 2024

Subject: Declaration of RoHS Compliance

Dear Customer,

This letter is to declare that, to the best of ASUS's knowledge, the product(s) as listed below ("Product"), when shipped by ASUS, are all in compliance with the applicable provisions of DIRECTIVE 2011/65/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment and its amendment DIRECTIVE 2015/863/EU of 31 March 2015 (collectively as "RoHS"). Nevertheless, ASUS provides no declaration with respect to noncompliance arising from those materials, parts or components supplied or designated by Customer or any specification, design, or instruction provided by Customer.

Product Name	Model Name
NOTEBOOK(COMMERCIAL)	B3604CM

Sincerely yours,

ASUSTEK COMPUTER INC.

TS Wu

GreenASUS Management Representative

Form No : P-GA2-019-01 Rev.10

BP-2400077





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1.1.8 - Certificado ISO 50001



Building trust together.

# Certificate

CISQ/IMQ has issued an IQNET recognized certificate that the organization:

**ASUSTeK Computer Inc.**

**No.15, Lide Rd., Beitou Dist., Taipei City 112, Taiwan (R.O.C.)**

has implemented and maintains a  
**Energy Management System**

for the following scope:

**Design, outsourcing production (including manufacturing management) and services of Computer, communications, electronic products.**

which fulfils the requirements of the following standard:

**ISO 50001:2018**

Issued on: **2022/06/30**  
Expires on: **2025/06/29**

Registration Number: **IT - 138676**

**Alex Stoichitoiu**  
President of IQNET

**Mario Romersi**  
President of CISQ



This attestation is directly linked to the IQNET Member's original certificate and shall not be used as a stand-alone document.

**IQNET Members\*:**

**AENOR** Spain **AFNOR Certification** France **APCER** Portugal **CCC** Cyprus **CISQ** Italy **CQC** China **CGM** China **CQS** Czech Republic **Cro Cert** Croatia **DQS Holding GmbH** Germany **EAGLE Certification Group** USA **FCAV** Brazil **FONDONORMA** Venezuela **ICONTEC** Colombia **ICS** Bosnia and Herzegovina **Inspecta Sertifointli Oy** Finland **INTECO** Costa Rica **IRAM** Argentina **JQA** Japan **KFQ** Korea **LSQA** Uruguay **MIRTEC** Greece **MSZT** Hungary **Nemko AS** Norway **NSAI** Ireland **NYCE-SIGE** Mexico **PCBC** Poland **Quality Austria** Austria **SII** Israel **SIO** Slovenia **SIRIM OAS International** Malaysia **SQS** Switzerland **SRAC** Romania **TSE** Turkey **YUQS** Serbia

\*The list of IQNET Members is valid at the time of issue of this certificate. Updated information is available under [www.iqnet-certification.com](http://www.iqnet-certification.com)





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1.1.9 - Certificado Huella de Carbono



Product Introduction

1.78 kg

Product weight

4 years

Lifetime

16"

Screen Size

Worldwide

Use location



China

Final Manufacturing location

Product carbon footprint has been assessed and certified as meeting the requirement of ISO 14067: 2018.

WHY WE DO

ASUS is committed to continuously improving the environmental performance of the products you purchase. Through product carbon footprint reports (PCF), we show the environmental impact of product lifecycles from design to disposal.

Product Features



HOW WE CONDUCT

Life cycle assessment (LCA) is commonly referred to as a "cradle-to-grave" analysis. Throughout the entire life cycle of a product, and the assessment includes the contributions material extraction, manufacturing, packaging and ship, use and end-of-life management.







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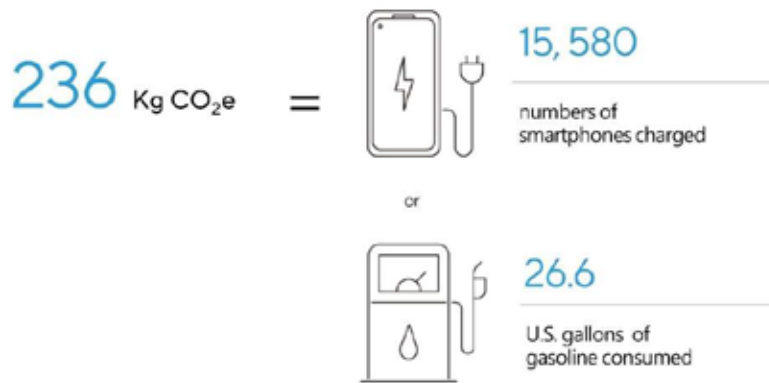
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## WHAT WE PRESENT

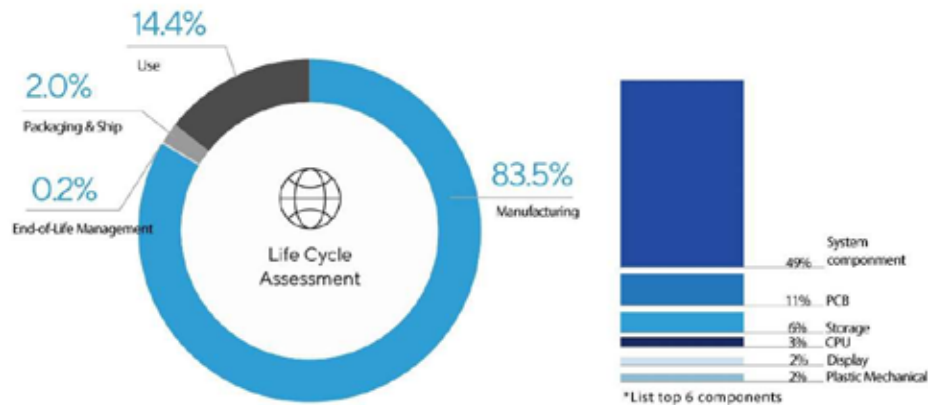
This product's estimated carbon footprint:

We will demonstrate the total product carbon emission and also provide the approximate equivalencies to let user well understand the concept of carbon emission.



The methodology of calculations are based on [US EPA](#)

The estimated impact across the product's life cycle and with the information of main factors from manufacturing phase.





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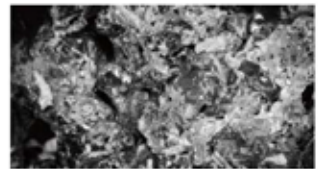
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Phase 1 2 3 4 **Manufacturing**

**Raw Material Procurement**

ASUS controls all materials used in the manufacture of products, including the purchase of metals. To ensure that metals meet legal mining and operations, ASUS requires suppliers that meet third party verification. The source of raw materials is in line with the supply chain of the international Responsible Mineral Initiative (RMI) due diligence and management.



**Hazardous Substance Free**

All ASUS products comply with the mandatory requirement from European Union's Electrical and Electronic Equipment Restriction of Hazardous substances (EU RoHS) and other national hazardous substances control laws, and all print circuit board laminates also meet voluntary halogen-free requirement.



**Recycle Material**

ASUS continues to increase the use of recycled plastics & metals in our products. B3604CM is made with 28.6% post-consumer recycled plastic based on product weight.

**Human Right**

ASUS protects labor rights and implements responsibility manufacturing. To commit the protection, ASUS joined to Responsible Business Alliance as the full member.



**Supplier Energy Use**

B3604CM final assembly supplier sites are transitioning to over 90% renewable energy for ASUS production.

Phase 1 2 3 4 **Packaging and Ship**

ASUS have designed the packaging to minimize its weight and volume, which helps conserve natural resources and allows more devices to be transported in a single shipping container. B3604CM use 90% recycled content by total weight of wood based fiber.





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Phase 1 2 3 4 Use

Energy Saving

B3604CM meet the requirement of Energy Star and average energy consumption is lower than Energy star standard 60%.



The methodology of calculations are based on [US EPA](#)

Phase 1 2 3 4 End-of-Life Management



Product modular design, 90% materials and components are easy to recycle and reuse. ASUS promises to recycle second-hand electronic products, and cooperate with qualified recyclers to properly recycle the waste products, in line with the EU Waste Electrical and Electronic Equipment Directive (EU WEEE) and other national waste management laws. The five major regions provide recycling services, including Europe, North America, Taiwan, China, and Australia.



Modular design: 90% materials and parts are easy to recycle and reuse in waste treatment plants



To see more ASUS' sustainability effort



## DEFINITIONS

### Methodology

Estimated emissions are calculated in accordance with guidelines and requirements as specified by ISO 14040, ISO 14044 and follow ISO 14067 to conduct product carbon footprint for quantification. There is inherent uncertainty in modeling carbon emissions due primarily to data limitations.

### Life Cycle

With reference to the ISO 14040 standard, the main stages of the environmental life cycle of the product are defined raw material procurement, product manufacturing, product transportation, product use, and product waste.

### Calculation

The environmental footprint of this product is calculated using the life cycle assessment software SimaPro 9.5; and based on the Ecoinvent 3 database data, the carbon footprint of each phase is calculated using the IPCC 2021 GWP 100 method.

### Manufacturing

It includes the refining, manufacturing, transportation of raw materials, as well as the manufacture, assembly and transportation of parts and packaging materials.

### Packaging and Ship

The route is from the final assembly factory to the Shanghai Airport in China, and then distributed to the warehouses in various continents. Transportation methods include: land by truck and rail, and air by airplane. Considering the reduction of transportation carbon footprint, ASUS prioritizes the use of rail in land.

### Use

The period of use is set to 4 years, and the carbon footprint of this phase is calculated based on the data of the ENERGY STAR standard test method.

### End-of-Life Management

According to the recovery processing vendor model and path calculation of ASUS regional cooperation.

### Uncertainty

There are uncertainties in this report caused of the following factors:

- ① Uncertainty in modeling carbon emissions due primarily to data limitations. For the top component contributors to ASUS's carbon emissions, ASUS addresses this uncertainty by developing detailed process-based environmental models with ASUS-specific parameters. For the remaining elements of ASUS's carbon footprint, rely on industry average data and assumptions. Calculation includes emissions for the following life cycle phases contributing to Global Warming Potential (GWP 100 years) in CO<sub>2</sub> equivalency factors (CO<sub>2</sub>e).
- ② Impact calculation of production phase including the refining, manufacturing, transportation of raw materials, as well as the manufacture, assembly and transportation of parts and packaging materials are based on the database of SimaPro software, not primary data.
- ③ Impact calculation of use phase is based on Energy Star test result and is assumed.



### 1.1.10 - RBA (Responsible Business Alliance)

Puedes comprobar su pertenencia en este organismo en su propia WEB:

<https://www.responsiblebusiness.org/about/members/>

### 1.1.11 - Resumen cumplimiento especificaciones técnicas KIT-DIGITAL

COMPONENTE	REQUISITO	CUMPLE/MEJORA	OFERTADO
Procesador	El procesador del dispositivo tendrá un mínimo de 4 núcleos físicos	CUMPLE	El procesador del dispositivo tiene 12 núcleos físicos
	Velocidad de reloj (CPU clock) máxima (en modo turbo o equivalente) de al menos 2.9 GHz	CUMPLE	Velocidad de reloj (CPU clock) máxima (en modo turbo o equivalente) de 4.3 GHz
	Su fecha de lanzamiento deberá ser posterior al primer trimestre de 2023	CUMPLE	Q4'23 <a href="https://www.intel.la/content/www/xl/es/products/sku/237330/intel-core-ultra-5-processor-125u-12m-cache-up-to-4-30-ghz/specifications.html">https://www.intel.la/content/www/xl/es/products/sku/237330/intel-core-ultra-5-processor-125u-12m-cache-up-to-4-30-ghz/specifications.html</a>
	Deberá haber obtenido una puntuación mínima de 15.000 en PassMark Software, con fecha 13 de mayo de 2024. Se deberá comprobar el Anexo I	CUMPLE	17.186 puntos
Memoria RAM	El dispositivo deberá de disponer de una memoria de 16 GB DDR4 o tecnología superior equivalente	CUMPLE	16GB DDR5-5600MT/s
	Tecnología DDR4, DDR5, LPDDR4 o LPDDR5	CUMPLE	
Almacenamiento	El dispositivo deberá proveer un mínimo de 512 GB de almacenamiento interno SSD NVMe	CUMPLE	512GB M.2 2280 NVMe™ PCIe® 4.0 SSD
	Todos los datos y documentos contenidos en el ordenador deberán estar protegidos por el encriptado/cifrado en reposo con el fin de garantizar la seguridad de los mismos. Las contraseñas del encriptado deberán ser proporcionadas por el Agente Digitalizador Adherido al beneficiario al momento de la entrega del dispositivo	CUMPLE	Trusted Platform Module (TPM) 2.0 + BitLocker
Sistema operativo	El sistema operativo deberá tener fin profesional. Este se proporcionará conjuntamente con cada dispositivo y vendrá preinstalado y licenciado de fábrica. Se admitirá Microsoft Windows 11 Profesional y MacOS 14	CUMPLE	Windows 11 Pro 64 Bits
Tarjeta gráfica	El dispositivo deberá tener una tarjeta gráfica dedicada o integrada	CUMPLE	El dispositivo tiene una tarjeta gráfica integrada Intel® Graphics
	Resolución mínima Full HD	CUMPLE	WUXGA (1920 x 1200)
	Deberá soportar el uso de dos monitores	CUMPLE	Soportar el uso de dos monitores
Tarjeta de sonido	El dispositivo deberá tener una tarjeta de sonido integrada	CUMPLE	El dispositivo tiene una tarjeta de sonido integrada
Conectividad Inalámbrica	El dispositivo deberá tener una tarjeta de red integrada de conectividad inalámbrica compatible con el estándar Wi-Fi 6 o superior	CUMPLE	Wi-Fi 6(802.11ax) (Dual band) 2*2
	Asimismo, proveerá conectividad Bluetooth 5.1 o superior	CUMPLE	Bluetooth® 5.2
Interfaces de entrada/ salida	Al menos 2 puertos USB 3.0 o superior, tipo A	CUMPLE	2x USB 3.2 Gen 2 Type-A
	Al menos 1 puerto USB 3.0 o superior, tipo C. Al menos uno de ellos con funciones DisplayPort + Power Delivery + USB	CUMPLE	2x Thunderbolt™ 4, compliant con USB4, soporta display(DP) / power delivery



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	Un puerto Ethernet RJ-45 1 Gbps	CUMPLE	1x RJ45 Gigabit Ethernet
	Un puerto HDMI 1.4 o superior	CUMPLE	1x HDMI 2.1 TMDS
	Al menos un interfaz jack 3.5 mm combo para auriculares y micrófono	CUMPLE	1x 3.5mm Combo Audio Jack (auriculares y micrófono)
	En el caso de ordenador portátil, se admite proporcionar los interfaces mediante dispositivos tipo dock station, replicador de puertos o similar	CUMPLE	N/A
<b>Pantalla</b>	Pantalla de tamaño mínimo de 13 pulgadas	CUMPLE	16 pulgadas
<b>Ratón</b>	Ratón integrado o touchpad	CUMPLE	Touchpad
<b>Webcam</b>	Al menos con resolución HD	CUMPLE	720p HD camera Con persiana de privacidad
	Cámara web integrada con obturador de privacidad	CUMPLE	
<b>Batería</b>	Batería tipo smart battery o similar	CUMPLE	Batería tipo smart battery
<b>Lector de tarjetas smartcard (DNI-e)</b>	Lector de tarjetas inteligentes que cumpla el estándar ISO-7816. Se admitirá dispositivo integrado o no integrado	CUMPLE	Lector de tarjetas inteligentes integrado que cumple el estándar ISO-7816
<b>Certificaciones deberán contar con al menos una certificación de los siguientes tipos (o similar)</b>	ENERGY STAR®	CUMPLE	<a href="https://www.energystar.gov/productfinder/product/certified-computers/details/3354366">https://www.energystar.gov/productfinder/product/certified-computers/details/3354366</a>
	EPEAT™ Silver Registered	CUMPLE	EPEAT GOLD: <a href="https://www.epeat.net/product-details/d79d1ebcac844236a23d289d9bac4c6c?backUrl=%252Fcomputers-and-displays-search-result%252Fpage-1%252Fsize-25%253FproductName%253DB3604CM">https://www.epeat.net/product-details/d79d1ebcac844236a23d289d9bac4c6c?backUrl=%252Fcomputers-and-displays-search-result%252Fpage-1%252Fsize-25%253FproductName%253DB3604CM</a>
	TCO	CUMPLE	TCO Certified 9.0
<b>Robustez</b>	Certificación MIL STD 810H o equivalente. Deberán cumplir un mínimo de 5 métodos, entre ellos: alta temperatura, baja temperatura y humedad	CUMPLE	Certificación MIL STD 810H. Cumple con un mínimo de 5 métodos, entre ellos: alta temperatura, baja temperatura y humedad
<b>Certificaciones</b>	Los equipos cumplirán con los requisitos relacionados con la energía establecidos de acuerdo con la Directiva 2009/125/EC para servidores y almacenamiento de datos, o computadoras y servidores de computadoras o pantallas electrónicas	CUMPLE	Certificado CE
	Los equipos utilizados no contendrán las sustancias restringidas enumeradas en el anexo II de la Directiva 2011/65/UE, excepto cuando los valores de concentración en peso en materiales homogéneos no superen los enumerados en dicho anexo.	CUMPLE	Certificado ROHs
	En estas adquisiciones se activarán medidas para asegurar la compra de aquellos equipos energéticamente eficientes, que sean absolutamente respetuosos con el "Code of Conduct for ICT" de la Comisión Europea, y se tomarán medidas para que aumente la durabilidad, la posibilidad de reparación, de actualización y de reutilización de los productos, de los aparatos eléctricos y electrónicos implantados. Al finalizar la vida útil de la tecnología digital adquirida deberá ser tratada de acuerdo con la legislación vigente (incluyendo que los equipos se someterán a una preparación para operaciones de reutilización, recuperación o reciclaje, o un tratamiento adecuado, incluida la eliminación	CUMPLE	ISO 50001 Product Carbon Footprint Report Asus es miembro de la RBA(Responsible Business Alliance (RBA)) <a href="https://www.responsiblebusiness.org/about/members/">https://www.responsiblebusiness.org/about/members/</a>





	de todos los fluidos y un tratamiento selectivo de acuerdo con el anexo VII de la Directiva 2012/19/UE) y no tendrá un impacto negativo sobre los objetivos medioambientales		
<b>Seguridad</b>	Arranque seguro: el dispositivo contará con medidas de protección del proceso de arranque contra ataques de seguridad mediante código malicioso tipo Secure Boot	CUMPLE	BIOS/UEFI Secure Mode (Secure Boot enable/disable)
<b>Chip TPM, T2 o similar, según plataforma</b>	El dispositivo contará con chip TPM o T2 para fortalecer la integridad del sistema, mitigar riesgos de ataques cibernéticos y ofrecer una base más sólida para la seguridad	CUMPLE	Trusted Platform Module (TPM) 2.0
<b>Identificación biométrica</b>	El dispositivo implementará (vía hardware o sistema operativo) elementos de seguridad biométrica: cámara para reconocimiento facial, lector de huellas dactilares, reconocimiento de voz o reconocimiento de iris para reforzar la seguridad de los accesos al sistema	CUMPLE	Lector Huella dactilar