

# Technical Details



Modern displays with IPS panels have bright areas along the frame as a normal characteristic. This has hardly any influence on everyday operation, not least because the displays are optimized for daylight operation. It can only be minimized, but not completely avoided, regardless of the manufacturer and for manufacturing reasons. Details on pixel error classes can be found here.

#### 3K HiDPI Omnia Display non-glare 90 Hz

14", 16:10, anti-reflective, LTPS Viewing angle: 89°/89°/89°/89°

Resolution: 2880 x 1800 Pixel

Model: Optoelectronics T3 MNE007ZA1-1

Color gamut (sRGB | AdobeRGB | DCI-P3): 99 % | 74,7% | 81,1%

Maxiumum brightness: 400 cd/m2

Contrast: 1500:1

Display opening angle: approx. 150°



#### Chassis

Notebook: Length: 308.8 mm; Width: 215 mm; Height: 16,6 mm

Weight: 1.3 kg incl. battery, depending on equipment

Material: Display lid, top and bottom case made of magnesium alloy (AZ91D), Display frame

made of plastic

Maintenance: After opening the base plate via a series of screws, all components and fans are easily accessible, easy to maintain, clean and replace.

Power supply: 90 watts | Length: 129 mm; Width: 54 mm; Height: 30 mm | Weight: 326 grams

Power cord: Length: 170cm | Weight: 156 grams



Monocolor (white) backlit keyboard, means that the writing on the keys have backlight! Brightness can be controlled and deactivated by special keys.

TUX super-key on all layouts!

Big precision glass clickpad with integrated buttons and multi-gesture- & scroll-function



#### **Ports**

2x USB-A 3.2 Gen1

1x USB-C 3.2 Gen2 (incl. DisplayPort 1.4, Power Delivery DC-In\* | 5V/3A)

1x Thunderbolt 4 (PCIe Gen3 4 Lanes) / USB-C (DisplayPort 1.4a, Power Delivery DC-In\* | 5V/3A)

1x HDMI 2.0b

1x 2-in-1 audio (headphone + mic)

1x Full size SD card reader

1x DC-IN/power connection (also via USB-C\*)

1x Kensington Nano Security Slot™

\* Requirement: min. 20V/3.25A (65W)

USB-C 3.2 Gen2 (left side): Power Delivery DC-In only when powered on or in energy-saving mode, not enabled when powered off or in sleep mode.

Thunderbolt 4 (right side): Power Delivery DC-In even when powered off.



### Card reader

Full size SD card reader (SD/SDHC/SDXC)



### Security

- Kensington-Lock mounting
- Intel Management Engine (Intel ME) can be disabled directly via the BIOS
- Webcam & audio (only on Intel CPUs) can be deactivated directly via the BIOS
- WLAN & Bluetooth can be deactivated directly via the BIOS
- TPM 2.0 (via Intel PTT) (can be activated/deactivated via BIOS)



## Battery & power supply

Integrated 99 Wh lithium-polymer battery

#### **Power supply:**

**90 W** power supply (AC) | 129 x 53 x 30 mm | 482 g incl. EU power cable

Power can also be supplied via USB-C (Power Delivery DC-In)

Requirement: min. 20V/3.25A (65W)

Power plug:

Type: Coaxial

Inner diameter: 2.5mm Outer diameter: 5.5mm

Length: 10mm

#### Battery life:

Unit with Intel integrated graphics only:

**Up to 16 hours** at min. display-brightness, without Wifi & Bluetooth, without keyboard backlit, in idle mode

**Up to 9 hours** at medium brightness with Wifi, at office work

We're testing battery time always in idle mode, at minimal display brightness, with keyboard backlight deactivated, Wi-Fi & Bluetooth disabled and without any further connected devices (USB, LAN, HDMI, VGA etc. unplugged!). We always test with integrated graphics when a dedicated and integrated graphics chip is installed.

This way you get an information of maximal possible battery life. Starting from this, you can manage your individual battery life depending on your demands and to influence it e.g. is keyboard backlight unnecessary during daylight. Bluetooth is also only needed to be turned on, if there's a Bluetooth device connected. Full display brightness as well is hardly always necessary.



## Main processor

#### Intel Core i7-12700H

(14 Cores (6 Performance-cores | 8 Efficient-cores) | 20 Threads | Max. 4,7 GHz | 24 MB Cache, 45 W TDP)



## Graphics card

Intel Iris Xe Graphics 96 | Max. clock speed: 1400 MHz | EUs (Execution Units): 96 Optional: **NVIDIA GeForce RTX 3050 Ti** | 4 GB GDDR6 VRAM | 35 W TGP (+10 W Dynamic Boost)

It is possible to **drive 4 displays** at the same time. 3 external plus the internal notebook display or 4 external displays.

Max. resolution (HDMI 2.0b):  $3840 \times 2160 \otimes 60 \text{ Hz}$  (hardwired to the iGPU) Max. resolution (DisplayPort 1.4a):  $7680 \times 4320 \otimes 60 \text{ Hz}$  oder  $2 \times 3840 \times 2160 \otimes 60 \text{ Hz}$  (hardwired to the iGPU)

**All display ports** are connected to the **iGPU** of the main processor for power efficient operation.



DDR4 3200 MHz SoDIMM | 2 sockets upgradeable | max. 64 GB | Dual Channel



Mass storage (SSD / HDD)

1x M.2 2280 for NVME (PCI-Express 4.0 x4 oder PCI-Express 3.0 x4) Intel Optane Technology



## Communication / Network

#### Wireless/WIFI:

Intel Wi-Fi 6 AX200 Series:

Interface: M.2 2230

Wireless LAN / WLAN standards: 802.11 ac/a/b/g/n/ax

DualBand 2,4 / 5 GHz

Communication channels: 2x2

Transfer rate: 300 Mbit/s (2.4GHz WIFI) / 2,4Gbps (5GHz WIFI)

#### **Bluetooth:**

Integrated in above Intel Dual Band Wi-Fi AX200 Series

Version: Dual Mode Bluetooth 5.2



## Webcam / Laptop camera

1.0 Megapixel webcam with face detection



High Definition Audio 2 x W integrated speakers Integrated microphone



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## Cooling System & Fan

#### Temperature controlled fan

At low system workload there is less heat emerging. The cooling system fans can spin accordingly slow or even turn themselves off completely. Depending on the chassis, cooling system and CPU and GPU, high to very high fan noise (air swooshing) is produced under full load. Thinner notebooks normally tend to get louder due to less cooling capacity.

#### **Custom performance and fan control with the TUXEDO Control Center**

With the TUXEDO Control Center you are able to control the performance and the behavior of the fans by yourself. This means that you get the ability to make your device as quiet as possible. By heavily reducing the performance you are able to set the device almost passive cooled, without any fan noise most of the time!

**!** 

Model-ID: IBP1407







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