LG

LG Gram Pro 16Z90TP-K.AA78A1 laptop Intel Core Ultra 7 225H 40.6 cm (16") WQXGA+ 16 GB LPDDR5x-SDRAM 1 TB SSD Wi-Fi 7 (802.11be) Windows 11 Home Black

Brand : LG

Product family: Gram Pro

Product code: 16Z90TP-K.AA78A1

Product name : 16Z90TP-K.AA78A1

- 16" 16:10 WQXGA+ (2880x1800) OLED display
- AI assistant Copilot in Windows 11
- AI optimised Intel® Core™ Ultra Processor / LPDDR5x RAM / NVMe Gen4 SSD
- gram Hybrid AI / LG gram Link
- 1,199g Lightweight / 77Wh smart battery
- 48-120Hz Variable Refresh Rate (VRR)

16" OLED WQXGA+ (2880x1800), 400nit, 16GB RAM, 1 TB NVMe Gen4, Intel® Arrow Lake Processor Ultra7 255H, gram AI, BT 5.4, WiFi-7, 77 Wh Li-Ion, Obsidian Black, Windows 11 Home

LG Gram Pro 16Z90TP-K.AA78A1. Product type: Laptop, Form factor: Clamshell. Processor family: Intel Core Ultra 7, Processor model: 225H, Processor frequency: 5.1 GHz. Display diagonal: 40.6 cm (16"), HD type: WQXGA+, Display resolution: 2880 x 1800 pixels. Internal memory: 16 GB, Internal memory type: LPDDR5x-SDRAM. Total storage capacity: 1 TB, Storage media: SSD. On-board graphics card model: Intel Arc 140T. Operating system installed: Windows 11 Home. Product colour: Black

Design

Colour name	Obsidian Black
Product type *	Laptop
Product colour *	Black
Form factor *	Clamshell
Housing material	Magnesium
Market positioning	High performance
Introduction year	2025
Country of origin	China
Original brand name	LG

Display

Display diagonal *	40.6 cm (16")
Display resolution *	2880 x 1800 pixels
Touchscreen *	✗
HD type	WQXGA+
Panel type	OLED
Native aspect ratio	16:10
Display surface	Matt
Anti-glare screen	✔
Display brightness	400 cd/m²
Display diagonal (metric)	40.6 cm
RGB colour space	DCI-P3
Colour gamut	99%
Maximum refresh rate	144 Hz
Contrast ratio (typical)	1500:1

Processor

Processor manufacturer *	Intel
Processor family *	Intel Core Ultra 7
Processor generation	Intel Core Ultra (Series 2)
Processor model *	225H
Processor cores	16
Processor threads	16
Processor boost frequency	5.1 GHz
Processor frequency *	5.1 GHz
Performance cores	6

Graphics

On-board graphics card 6K support	✔
On-board graphics card 8K support	✔
Graphics card Open GL support	✔

Audio

Audio system	Dolby Atmos
Number of built-in speakers	2
Speaker power	3 W
Built-in microphone	✔
Number of microphones	2

Camera

Front camera	✔
Front camera resolution	1920 x 1080 pixels
Front camera HD type	Full HD
Infrared (IR) camera	✔

Network

Top Wi-Fi standard *	Wi-Fi 7 (802.11be)
Wi-Fi standards	Wi-Fi 7 (802.11be)
Mobile network connection *	✗
Antenna type	2x2
WLAN controller model	Intel Wi-Fi 7 BE201
WLAN controller manufacturer	Intel
Bluetooth	✔
Bluetooth version	5.4

Ports & interfaces

USB 3.2 Gen 1 (3.1 Gen 1) Type-A ports quantity *	2
USB4 Gen 3x2 ports quantity	2
HDMI ports quantity *	1
HDMI version	2.1
Thunderbolt 4 ports quantity	2
Intel® Thunderbolt 4	✔
Headphone outputs	1

Processor

Efficient cores	8
Low Power Efficient-cores	2
Performance-core Max Turbo Frequency	5.1 GHz
Efficient-core Max Turbo Frequency	4.4 GHz
Low Power Efficient-core Max Turbo Frequency	2.5 GHz
Performance-core base frequency	2 GHz
Efficient-core base frequency	1.5 GHz
Low Power Efficient-core Base Frequency	700 MHz
Processor cache	24 MB
Processor cache type	Smart Cache
Processor base power	28 W
Maximum turbo power	115 W

Neural processor unit (NPU)

Neural processor unit (NPU)	Intel AI Boost
Sparsity support	✔
Windows Studio effects support	✔
AI datatype support on NPU	Int8
AI software frameworks supported by NPU	DirectML, ONNX RT, OpenVINO, WebNN, Windows ML
Total processor performance up to	96 TOPs
NPU performance up to	13 TOPs
GPU performance up to	74 TOPs

Memory

Internal memory *	16 GB
Internal memory type	LPDDR5x-SDRAM
Memory clock speed	8400 MHz
Memory channels	Dual-channel

Storage

Total storage capacity *	1 TB
Storage media *	SSD
Total SSDs capacity	1 TB
Number of SSDs installed	1
SSD capacity	1 TB
SSD interface	PCI Express 4.0
NVMe	✔
SSD form factor	M.2
Optical drive type *	✘

Graphics

Discrete graphics card model *	Not available
On-board graphics card *	✔
On-board GPU manufacturer	Intel
Discrete graphics card *	✘
On-board graphics card family	Intel Arc Graphics
On-board graphics card model *	Intel Arc 140T
On-board graphics card 4K support	✔

Ports & interfaces

Microphone in	✔
Combo headphone/mic port	✔
USB Type-C DisplayPort Alternate Mode	✔

Keyboard

Pointing device	Touchpad
Numeric keypad *	✔
Keyboard backlit	✔
Full-size keyboard	✔
Keyboard number of keys	98
Keyboard layout	QWERTY
Copilot key	✔

Software

Operating system architecture	64-bit
Pre-installed software	gram Chat, LG Smart Assistant, LG gram Link, LG Security Guard, LG Lively Theme, LG Glance by Mirametrix®, Dolby Atmos, Intel® Connectivity Performance Suite, LG xboom buds
Trial software	McAfee Live Safe (30 Days Trial), Microsoft 365 (30 Days Trial)
Operating system installed *	Windows 11 Home
Microsoft Copilot	✔

Processor special features

Video decode engine	✔
Video encode engine	✔

Brand-specific features

Brand specific technologies	Intelligent Privacy, Wide color (P3)

Battery

Battery technology	Lithium-Ion (Li-Ion)
Battery capacity *	77 Wh

Power

AC adapter power	65 W
USB Type-C charging port *	✔
USB Type-C required charging power (max) *	65 W
USB Power Delivery (USB PD)	✔

Security

Cable lock slot	✔
Cable lock slot type	Kensington
Face recognition	✔
Windows Hello	✔

Certificates

Certification	MIL-STD-810H

Weight & dimensions

Width	357.7 mm
Depth	251.6 mm
Height (front)	1.24 cm
Height (rear)	1.28 cm
Weight *	1.2 kg

Packaging data

Package width	475 mm
Package depth	290 mm
Package height	60 mm

Packaging data	
Package weight	2.35 kg
Packaging content	
AC adapter included *	✔
Other features	
Warranty period	1 year(s)

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