ASUS ROG Strix G512LW-HN038 Intel® Core™ i7 i7-10750H Laptop 39,6 cm (15.6") Full HD 16 GB DDR4-SDRAM 512 GB SSD NVIDIA® GeForce RTX™ 2070 Wi-Fi 6 (802.11ax) FreeDOS Black

Brand : ASUS

Product family: ROG

Article code: 90NR0391-M01190

Product name : G512LW-HN038

ASUS ROG Strix G512LW-HN038. Product type: Laptop, Form factor: Clamshell. Processor family: Intel® Core™ i7, Processor model: i7-10750H, Processor frequency: 2,6 GHz. Display diagonal: 39,6 cm (15.6"), HD type: Full HD, Display resolution: 1920 x 1080 pixels. Internal memory: 16 GB, Internal memory type: DDR4-SDRAM. Total storage capacity: 512 GB, Storage media: SSD. On-board graphics card model: Intel® UHD Graphics. Operating system installed: FreeDOS. Product color: Black

Design

Product type *	Laptop
Product color *	Black
Form factor *	Clamshell
Market positioning	Gaming

Display

Display diagonal *	39,6 cm (15.6")
Display resolution *	1920 x 1080 pixels
Touchscreen *	✗
HD type	Full HD
Panel type	IPS
LED backlight	✔
Native aspect ratio	16:9
Display brightness	250 cd/m²
Maximum refresh rate	144 Hz

Processor

Processor manufacturer *	Intel
Processor family *	Intel® Core™ i7
Processor generation	10th gen Intel® Core™ i7
Processor model *	i7-10750H
Processor cores	6
Processor threads	12
Processor boost frequency	5 GHz
Processor frequency *	2,6 GHz
System bus rate	8 GT/s
Processor cache	12 MB
Processor cache type	Smart Cache
Processor socket	BGA 1440
Processor lithography	14 nm

Network

Top Wi-Fi standard *	Wi-Fi 6 (802.11ax)
Wi-Fi standards	802.11a, 802.11b, 802.11g, Wi-Fi 4 (802.11n), Wi-Fi 5 (802.11ac), Wi-Fi 6 (802.11ax)
Mobile network connection *	✗
Antenna type	2x2
Ethernet LAN	✔
Ethernet LAN data rates	10,100,1000 Mbit/s
Bluetooth	✔
Bluetooth version	5.0

Ports & interfaces

USB 3.2 Gen 1 (3.1 Gen 1) Type-A ports quantity *	3
USB 3.2 Gen 2 (3.1 Gen 2) Type-C ports quantity	1
Ethernet LAN (RJ-45) ports	1
HDMI ports quantity *	1
Combo headphone/mic port	✔

Performance

Virtual Reality (VR) ready	✔
Repairability index	6.8

Keyboard

Pointing device	Touchpad
Numeric keypad *	✗

Software

Operating system installed *	FreeDOS

Processor

Processor operating modes	64-bit
Processor codename	Comet Lake
Thermal Design Power (TDP)	45 W
Configurable TDP-down	35 W
Tjunction	100 °C
Maximum number of PCI Express lanes	16
PCI Express slots version	3.0
PCI Express configurations	1x16, 2x8, 1x8+2x4

Memory

Internal memory *	16 GB
Internal memory type	DDR4-SDRAM
Memory clock speed	3200 MHz
Memory slots	2x SO-DIMM
Maximum internal memory *	32 GB

Storage

Total storage capacity *	512 GB
Storage media *	SSD
Total SSDs capacity	512 GB
Number of SSDs installed	1
SSD capacity	512 GB
SSD form factor	M.2
Optical drive type *	✘

Graphics

Discrete graphics card model *	NVIDIA® GeForce RTX™ 2070
Discrete graphics card memory	8 GB
On-board graphics card *	✔
On-board GPU manufacturer	Intel
Discrete graphics card *	✔
On-board graphics card model *	Intel® UHD Graphics
On-board graphics card base frequency	350 MHz
On-board graphics card dynamic frequency (max)	1150 MHz
On-board graphics card DirectX version	12.0
On-board graphics card OpenGL version	4.5
On-board graphics card ID	0x9BC4

Audio

Number of built-in speakers	2
Speaker power	4,2 W
Built-in microphone	✔

Processor special features

Intel® Identity Protection Technology (Intel® IPT)	✔
Intel® Hyper Threading Technology (Intel® HT Technology)	✔
Enhanced Intel SpeedStep Technology	✔
Intel® Quick Sync Video Technology	✔
Intel Flex Memory Access	✔
Intel® AES New Instructions (Intel® AES-NI)	✔
Intel Trusted Execution Technology	✘
Intel VT-x with Extended Page Tables (EPT)	✔
Intel® Secure Key	✔
Intel Stable Image Platform Program (SIPP)	✘
Intel® OS Guard	✔
Intel Software Guard Extensions (Intel SGX)	✔
Intel 64	✔
Execute Disable Bit	✔
Idle States	✔
Thermal Monitoring Technologies	✔
Processor package size	42 x 28 mm
Supported instruction sets	SSE4.1, SSE4.2, AVX 2.0
CPU configuration (max)	1
Embedded options available	✘
Intel Virtualization Technology for Directed I/O (VT-d)	✔
Intel Virtualization Technology (VT-x)	✔
Processor ARK ID	201837

Power

AC adapter power	230 W

Security

Password protection	✔
Password protection type	BIOS, User

Weight & dimensions

Width	360 mm
Depth	275 mm
Height (front)	2,1 cm
Height (rear)	2,58 cm
Weight *	2,3 kg

Catalog Object Cloud