msi

MSI Gaming GS43VR 7RE(Phantom Pro)-084CZ Intel® Core™ i7 i7-7700HQ Laptop 35,6 cm (14") Full HD 16 GB DDR4-SDRAM 1,26 TB HDD+SSD NVIDIA® GeForce® GTX 1060 Wi-Fi 5 (802.11ac) Windows 10 Home Black
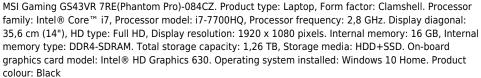
Brand : MSI **Product family:** Gaming **Product code:** GS43VR 7RE-084CZ

Product name : GS43VR 7RE(Phantom Pro)-084CZ

Intel Core i7-7700HQ (6M Cache, 2.80 GHz), 14" Full HD (1920x1080) LED, 16GB DDR4, 256GB SSD + 1TB SATA HDD, Intel HD Graphics 530 + NVIDIA GeForce GTX 1060 6GB GDDR5, Gigabit Ethernet, WLAN 802.11ac, Bluetooth, FHD WebCam, Windows 10 Home 64-bit

MSI Gaming GS43VR 7RE(Phantom Pro)-084CZ. Product type: Laptop, Form factor: Clamshell. Processor family: Intel® Core™ i7, Processor model: i7-7700HQ, Processor frequency: 2,8 GHz. Display diagonal: 35,6 cm (14"), HD type: Full HD, Display resolution: 1920 x 1080 pixels. Internal memory: 16 GB, Internal memory type: DDR4-SDRAM. Total storage capacity: 1,26 TB, Storage media: HDD+SSD. On-board graphics card model: Intel® HD Graphics 630. Operating system installed: Windows 10 Home. Product colour: Black

Design

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

Display

Display diagonal *	35.6 cm (14")
Display resolution *	1920 x 1080 pixels
Touchscreen *	✗
HD type	Full HD
LED backlight	✔
Native aspect ratio	16:9

Processor

Processor manufacturer *	Intel
Processor family *	Intel® Core™ i7
Processor generation	7th gen Intel® Core™ i7
Processor model *	i7-7700HQ
Processor cores	4
Processor threads	8
Processor boost frequency	3.8 GHz
Processor frequency *	2.8 GHz
System bus rate	8 GT/s
Processor cache	6 MB
Processor cache type	Smart Cache
Processor lithography	14 nm
Processor operating modes	64-bit
Processor series	Intel Core i7-7700 Mobile Series
Processor codename	Kaby Lake
Bus type	DMI3
Thermal Design Power (TDP)	45 W
Configurable TDP-down	35 W
Tjunction	100 °C
Maximum number of PCI Express lanes	16

Ports & interfaces

DVI port	✗
Headphone outputs	1
Microphone in	✔
Docking connector	✗

Performance

Virtual Reality (VR) ready	✔

Keyboard

Pointing device	Touchpad
Numeric keypad *	✗
Keyboard backlit	✔
Windows keys	✔

Software

Operating system architecture	64-bit
Operating system installed *	Windows 10 Home

Processor special features

Intel® Wireless Display (Intel® WiDi)	✔
Intel® My WiFi Technology (Intel® MWT)	✔
Intel® Smart Response Technology	✔
Intel® Identity Protection Technology (Intel® IPT)	✔
Intel® Hyper Threading Technology (Intel® HT Technology)	✔
Intel® Turbo Boost Technology	2.0
Enhanced Intel SpeedStep Technology	✔
Intel® Clear Video HD Technology (Intel® CVT HD)	✔
Intel Clear Video Technology	✔
Intel® InTru™ 3D Technology	✔
Intel® Quick Sync Video Technology	✔

Processor

PCI Express slots version	3.0
PCI Express configurations	1x16, 1x8, 2x4, 2x8
ECC supported by processor	✘

Memory

Internal memory *	16 GB
Internal memory type	DDR4-SDRAM
Memory form factor	SO-DIMM
Memory slots	2x SO-DIMM
Maximum internal memory *	32 GB

Storage

Total storage capacity *	1.26 TB
Storage media *	HDD+SSD
Number of HDDs installed	1
HDD capacity	1 TB
Number of SSDs installed	1
SSD capacity	256 GB
Optical drive type *	✘
Card reader integrated	✔
Compatible memory cards	SD, SDHC, SDXC

Graphics

Discrete graphics card model *	NVIDIA® GeForce® GTX 1060
Discrete graphics card memory	6 GB
Discrete graphics memory type	GDDR5
On-board graphics card *	✔
Discrete graphics card *	✔
On-board graphics card model *	Intel® HD Graphics 630
On-board graphics card base frequency	350 MHz
On-board graphics card dynamic frequency (max)	1100 MHz
Maximum on-board graphics card memory	64 GB
On-board graphics card DirectX version	12.0
On-board graphics card OpenGL version	4.4
On-board graphics card ID	0x591B
Number of discrete graphics cards installed	1
NVIDIA G-SYNC	✔
NVIDIA GameWorks VR	✔
CUDA	✔
NVIDIA 3D Vision	✔

Audio

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

Camera

Front camera	✔
Front camera resolution	1920 x 1080 pixels
Video capturing speed	30 fps

Network

Wi-Fi	✔
Top Wi-Fi standard *	Wi-Fi 5 (802.11ac)
Wi-Fi standards	802.11a, Wi-Fi 5 (802.11ac), 802.11b, 802.11g, Wi-Fi 4 (802.11n)
Ethernet LAN	✔

Processor special features

Intel Flex Memory Access	✔
Intel® Smart Cache	✔
Intel® AES New Instructions (Intel® AES-NI)	✔
Intel Trusted Execution Technology	✘
Intel Enhanced Halt State	✔
Intel VT-x with Extended Page Tables (EPT)	✔
Intel® Secure Key	✔
Intel TSX-NI	✘
Intel Stable Image Platform Program (SIPP)	✘
Intel® OS Guard	✔
Intel Software Guard Extensions (Intel SGX)	✔
Intel® Clear Video Technology for Mobile Internet Devices (Intel CVT for MID)	✔
Intel 64	✔
Execute Disable Bit	✔
Idle States	✔
Thermal Monitoring Technologies	✔
Processor package size	42 x 28 mm
Supported instruction sets	AVX 2.0, SSE4.1, SSE4.2
CPU configuration (max)	1
Embedded options available	✘
Graphics & IMC lithography	14 nm
Intel Virtualization Technology for Directed I/O (VT-d)	✔
Intel Identity Protection Technology version	1.00
Intel Smart Response Technology version	1.00
Intel Stable Image Platform Program (SIPP) version	0.00
Intel Secure Key Technology version	1.00
Intel Small Business Advantage (SBA) version	1.00
Intel TSX-NI version	0.00
Intel Virtualization Technology (VT-x)	✔
Processor ARK ID	97185
Conflict-Free processor	✔

Battery

Battery technology	Lithium Polymer (LiPo)
Number of battery cells	4

Power

AC adapter power	180 W
AC adapter frequency	50 - 60 Hz
AC adapter output voltage	19.5 V
DC-in jack	✔

Security

Cable lock slot	✔
Cable lock slot type	Kensington

Weight & dimensions

Width	345 mm
Depth	245 mm
Height (front)	2.18 cm
Height (rear)	2.28 cm

Network

Ethernet LAN data rates	10,100,1000 Mbit/s
Bluetooth	✔
Bluetooth version	4.1

Ports & interfaces

USB 3.2 Gen 1 (3.1 Gen 1) Type-A ports quantity *	2
USB 3.2 Gen 2 (3.1 Gen 2) Type-C ports quantity	1
Ethernet LAN (RJ-45) ports	1
HDMI ports quantity *	1
HDMI version	1.4
Mini DisplayPorts quantity	1

Weight & dimensions

Weight *	1.8 kg

Packaging content

AC adapter included *	✔
Manual	✔

Other features

3D	✘