MSI Gaming GE60 20E-208RU laptop Intel® Core™ i5 i5-4200M 39.6 cm (15.6") Full HD 12 GB DDR3-SDRAM 878 GB HDD+SSD NVIDIA® GeForce® GTX 765M Wi-Fi 4 (802.11n) Windows 8 Black

Brand : MSI **Product family:** Gaming **Product code:** GE60 20E-208RU

Product name: GE60

20E-208RU

Intel Core i5-4200M (3M Cache, 2.50 GHz), 15.6" Full HD (1920x1080) LED, 12GB DDR3, 2 x 64GB SSD + 750GB SATA HDD, Intel HD Graphics 4600 + NVIDIA GeForce GTX 765M 2GB GDDR5, DVD Super Multi, Gigabit Ethernet, WLAN 802.11 b/g/n, Bluetooth 4.0, HD WebCam, Windows 8 64-bit MSI Gaming GE60 2OE-208RU. Product type: Laptop, Form factor: Clamshell. Processor family: Intel® Core $^{\text{TM}}$ i5, Processor: i5-4200M, Processor frequency: 2.5 GHz. Display diagonal: 39.6 cm (15.6"), HD type: Full HD, Display resolution: 1920 x 1080 pixels. Internal memory: 12 GB, Internal memory type: DDR3-SDRAM. Total storage capacity: 878 GB, Storage media: HDD+SSD, Optical drive type: DVD Super Multi. Operating system installed: Windows 8. Product colour: Black





Design		Ports & interfaces	
Product type * Product colour * Form factor * Market positioning	Laptop Black Clamshell Gaming	USB 3.2 Gen 1 (3.1 Gen 1) Type-A ports quantity * Ethernet LAN (RJ-45) ports quantity HDMI ports quantity *	1
Display Display diagonal * Display resolution * Touch screen * HD type LED backlight Native aspect ratio Display surface	39.6 cm (15.6") 1920 x 1080 pixels	DVI port VGA (D-Sub) ports quantity Headphone outputs S/PDIF out port Microphone in Docking connector ExpressCard slot CardBus PCMCIA slot type	x 1 1 1 x x x x x
Processor Processor manufacturer *	Intel	SmartCard slot Performance	×
Processor family * Processor generation Processor * Processor number of cores	Intel® Core™ i5 4th gen Intel® Core™ i5 i5-4200M 2	Motherboard chipset Keyboard Pointing device	Intel® HM87 Touchpad
Processor further of cores Processor threads Processor boost frequency Processor frequency *	4 3.1 GHz 2.5 GHz	Numeric keypad * Keyboard backlit Keyboard layout	✓ ✓ QWERTY
System bus data transfer rate Processor cache Processor cache type Processor socket	5 GT/s 3 MB Smart Cache	Software Operating system architecture Operating system installed *	64-bit Windows 8
Processor lithography Processor operating modes	PGA946 22 nm 64-bit Intel Core i5-4200 Mobile series Haswell DMI	Processor special features Intel Wireless Display (WiDi) Technology	✓
Processor series Processor codename Bus type		Intel My WiFi Technology Intel Anti-Theft Technology	×
FSB Parity Stepping	X C0	Intel Identity Protection Technology Intel Hyper-Threading Technology	✓ ✓

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Processor	27.14	Processor special features	2.0
Thermal Design Power (TDP) Tjunction	37 W 100 °C	Intel Turbo Boost Technology Enhanced Intel SpeedStep	2.0
Maximum number of PCI Express		Technology	✓
lanes	16	Intel Clear Video HD Technology	✓
PCI Express slots version	3.0	Intel Clear Video Technology	×
PCI Express configurations	1x16, 2x8, 1x8+2x4	Intel® InTru™ 3D Technology	✓
ECC supported by processor	×	Intel® Insider™	1
Memory		Intel® Quick Sync Video Technology	1
Internal memory *	12 GB	Intel Flex Memory Access	×
Internal memory type	DDR3-SDRAM	Intel® Smart Cache	✓
Memory clock speed	1600 MHz	Intel AES New Instructions	✓
Memory form factor	SO-DIMM	Intel Trusted Execution Technology	×
Memory slots Maximum internal memory *	2x SO-DIMM 16 GB	Intel Enhanced Halt State	×
	10 05	Intel VT-x with Extended Page	1
Storage	070.00	Tables (EPT)	•
Total storage capacity *	878 GB	Intel Demand Based Switching	×
Storage media * Number of hard drives installed	HDD+SSD 1	Intel® Secure Key	✓
Hard drive capacity	750 GB	Intel TSX-NI	×
Hard drive interface	SATA	Intel Clear Video Technology for MID	×
Hard drive rotational speed	7200 RPM	Intel 64	✓
Number of SSDs installed	2	Execute Disable Bit	✓
Solid-state drive capacity	64 GB	Idle States	✓
Solid-state drive interfaces	mSATA	Thermal Monitoring Technologies	✓
Optical drive type *	DVD Super Multi	Processor package size	37.5 x 37.5 x 4.7 mm
Card reader integrated		Supported instruction sets	AVX 2.0, SSE4.1, SSE4.2
Compatible memory cards	SD, SDHC, SDXC	Processor code	SR1HA
Graphics		CPU configuration (max)	1
Discrete graphics card model *	NVIDIA® GeForce® GTX 765M	Embedded options available	X
Discrete graphics card memory	2 GB	Intel Virtualization Technology for Directed I/O (VT-d)	×
Discrete graphics memory type	GDDR5	Intel Identity Protection Technology	1.00
On-board graphics card *	√	version	
Discrete graphics card *	Intol® UD Craphics	Intel Secure Key Technology version Intel TSX-NI version	
On-board graphics card family On-board graphics card model *	Intel® HD Graphics Intel® HD Graphics 4600	Intel Virtualization Technology (VT-	0.00
On-board graphics card base	·	x)	•
frequency	400 MHz	Intel Dual Display Capable	x
On-board graphics card dynamic frequency (max)	1150 MHz	Technology Intel FDI Technology	
Maximum on-board graphics card		3,	X
memory	1.74 GB	Intel Rapid Storage Technology	X
On-board graphics card DirectX	11.1	Intel Fast Memory Access Processor ARK ID	X 76348
version On-board graphics card ID	0x416	Conflict-Free processor	70346 √
	ONTIU		•
Audio		Battery	
Audio system	Sound Blaster Cinema	Battery technology	Lithium-lon (Li-lon)
Number of built-in speakers Speaker power	4 2 W	Number of battery cells	6
Built-in microphone	∠ vv	Energy Management	
·	•	AC adapter power	120 W
Camera		AC adapter output voltage	19 V
Front camera	✓	DC-in jack	✓
Video capturing speed	30 fps	Security	
Network		Cable lock slot	x
Wi-Fi	✓	Weight & Dimensions	
Top Wi-Fi standard *	Wi-Fi 4 (802.11n)	Width	383 mm
Wi-Fi standards	802.11b, 802.11g, Wi-Fi 4 (802.11n)	Depth	249.5 mm
Ethernet LAN connection	/	Height (front)	3.23 cm
Ethernet LAN data rates	10,100,1000 Mbit/s		

	Height (rear) Weight *	3.76 cm 2.4 kg
00/1000Base-T(X)	Packaging Content	
	AC adapter bundled * Other features	✓
	LightScribe	×
)	0/1000Base-T(X)	AC adapter bundled * Other features

Catalog Object Cloud



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