

Specifications

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Dimensions

Height (front and back)	53.0 mm/54.70 mm (2.09 inches/2.15 inches)
Width	436.0 mm (17.17 inches)
Depth	322.5 mm (12.70 inches)
Weight with 12-cell battery and optical drive (starting at)	5.41 kg (11.93 lb) NOTE: The weight of your laptop will vary depending on the configuration ordered and the manufacturing variability.

System information

Processor	Intel Core i7 (2nd and 3rd generation)
L2 cache	256 KB
L3 cache	up to 8 MB
Bus clock	100 Mhz
System chipset	Mobile Intel HM77 Express Chipset
SDRAM bus width	one or two 64-bit channels of DDR3 memory up to 1600 MHz
Processor address bus width	32 bits
Processor data width	64 bits
BIOS EPROM	64 Mbit
Graphics bus	PCIe x16 Gen2 and Gen3

Memory

Connectors	four internally-accessible DDR3 using JEDEC SODIMM sockets
Capacities	2 GB, 4 GB, and 8 GB
Memory type	<ul style="list-style-type: none">up to 2133 MHz, unbuffered non-ECC, single-channel and dual-channel DDR3 configurationExtreme Memory Profiles (XMP) 1600 MHz, 1866 MHz, and 2133 MHz NOTE: The memory type supported by your computer may vary depending on the configuration ordered.
Memory configurations supported	4 GB, 6 GB, 8 GB, 12 GB, 16 GB, 24 GB, and 32 GB

Storage

Interface	<ul style="list-style-type: none">• SATA 2.0 (3 Gb/s) or SATA 3.0 (6 Gb/s)• mSATA (SATA 2.0)
Hard drive/solid-state drive	<ul style="list-style-type: none">• 9.5 mm height — up to two 2.5-inch drives• 7.0 mm height — up to three 2.5-inch drives
Drive configurations supported	<p>NOTE: The middle (HDD 2) connector on the interposer is a SATA 2.0 (3 Gb/s) connector. The top (HDD 0) and bottom (HDD 1) connectors on the interposer are SATA 3.0 (6 Gb/s) connectors.</p> <ul style="list-style-type: none">• One drive — Connect to top (HDD 0) or bottom (HDD 1) connector of the interposer• Two drives — Connect to top (HDD 0) and bottom (HDD 1) connectors of the interposer• Three drives — Connect to all the three connectors of the interposer
Optical drive	one slot-load optical drive supporting DVD+/-RW or Blu-ray disc writer

Communications

Network adapter	10/100/1000 Mbps Ethernet LAN on Motherboard (LOM)
Wireless	<ul style="list-style-type: none">• one half Mini-Card slot• one full Mini-Card slot• Bluetooth and Wi-Fi; Wireless Display (optional); WirelessHD (optional)

Touchpad

X/Y position resolution (graphics table mode)	742 cpi/1166 cpi
Size	
Height	54.0 mm (2.13 inches) sensor-active area
Width	100.0 mm (3.94 inches) rectangle

Audio

Controller	Creative Sound Core3D quad-core sound & voice processor
Speaker	dual 8-ohms speakers in both the left and right speaker assembly
Internal speaker amplifier	up to 5 W per channel; up to 10 W total power
Internal microphone support	left and right digital-array microphones in the camera assembly
Volume controls	program menus and keyboard media control keys

Video

Video controller

- | | |
|------------|---|
| Integrated | <ul style="list-style-type: none">▪ Intel HD Graphics 3000▪ Intel HD Graphics 4000 |
| Discrete | <ul style="list-style-type: none">▪ NVIDIA GeForce GTX 660M▪ NVIDIA GeForce GTX 675M▪ AMD Radeon HD 7970M |

Video memory

- | | |
|------------|---|
| Integrated | 512 MB dedicated video memory (for total system memory greater than 4 GB) |
| Discrete | 2 GB |

External display support	HDMI 1.4, Mini DisplayPort 1.2, and Intel Wireless Display (optional)
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Media Card Reader

- | | |
|-----------------|---|
| Cards supported | <ul style="list-style-type: none">▪ Secure Digital (SD) memory card▪ Secure Digital Input/Output (SDIO) card▪ Secure Digital Extended Capacity (SDXC) card▪ MultiMedia Card (MMC)▪ MultiMedia Card plus (MMC+)▪ Memory Stick▪ Memory Stick PRO▪ xD-Picture Card (type - M and type - H)▪ Hi Density-SD (SDHD)▪ Hi Capacity-SD (SDHC) |
|-----------------|---|

Ports and connectors

Network adapter	one RJ45 port
USB	four 9-pin USB 3.0-compliant ports
eSATA/USB combo	one 7-pin/4-pin eSATA/USB 2.0-compliant combo port with PowerShare and Windows debugging
HDMI	one 19-pin input port and one 19-pin output port
Mini DisplayPort	one 20-pin port
VGA	one 15-hole port
Audio	<ul style="list-style-type: none">▪ one stereo headphones/speakers port▪ one microphone/speakers port▪ one headphones/microphone/speakers combo port
S/PDIF	one S/P DIF port
Media Card Reader	one 9-in-1 slot
ExpressCard slot	one 54-mm ExpressCard slot

Backlit keyboard

Number of keys	107 (Korea, U.S., and Canada) 108 (Europe) 110 (Japan)
Backlight color	RGB; colors can be changed using the AlienFX software in the Alienware Command Center

Display

Type	18.40-inch FHD+ WLED TrueLife
Maximum resolution	1920 x 1080
Dimensions	
Height	230.04 mm (9.06 inches)
Width	408.96 mm (16.10 inches)
Diagonal	467.0 mm (18.39 inches)
Refresh rate	60 Hz
Operating angle	0° (closed) to 140°
Pixel pitch	0.2550 mm
Controls	brightness can be controlled through keyboard shortcuts

Camera

Camera resolution	2.1 megapixel
Video resolution	1920 x 1080 at 30 fps maximum
Diagonal viewing angle	66 degrees

Battery

12-cell "smart" lithium ion (97 Whr)

Height	30.20 mm (1.19 inches)
Width	174.0 mm (6.85 inches)
Depth	133.3 mm (5.25 inches)
Weight	0.65 kg (1.43 lb)
Voltage	12.0 VDC - 16.8 VDC
Operating time	battery operating time varies depending on operating conditions and can be significantly reduced under certain power-intensive conditions.
Life span (approximate)	300 discharge/charge cycles
Temperature range	
Operating	0°C to 50°C (32°F to 122°F)
Storage	-20°C to 60°C (-4°F to 140°F)
Coin-cell battery	CR-2032

Power adapter

Type	240 W/330 W
Input voltage	100-240 VAC
Input current (maximum)	
240 W	3.50 A
330 W	4.40 A
Input frequency	50-60 Hz
Output current	
240 W	12.30 A (continuous)
330 W	16.92 A
Output power	240 W/330 W
Rated output voltage	19.50 VDC

Power adapter

Temperature range

Operating

240 W 0°C to 40°C (32°F to 104°F)

330 W 10°C to 35°C (50°F to 95°F)

Storage -40°C to 70°C (-40°F to 158°F)

Connector types

DC connector 3-pin, 7.4 mm plug

AC connector 3-pin – C13

Computer environment

Temperature range

Operating 0°C to 35°C (32°F to 95°F)

Storage -40°C to 65°C (-40°F to 149°F)

Relative humidity (maximum)

Operating 10% to 90% (non-condensing)

Storage 10% to 95% (non-condensing)

Maximum vibration (using a random vibration spectrum that simulates user environment)

Operating 0.66 GRMS

Storage 1.3 GRMS

Maximum shock (Measured with hard drive in operating status and a 2-ms half-sine pulse for operating. Also measured with hard drive in head-parked position and a 2-ms half-sine pluse for storage)

Operating 110 G

Storage 160 G

Altitude (maximum)

Operating -15.2 m to 3048 m (-50 ft to 10,000 ft)

Storage -15.2 m to 10,668 m (-50 ft to 35,000 ft)

Airborne contaminant level G2 or lower as defined by ISA-S71.04-1985