

ALIENWARE® M15x COMPREHENSIVE SPECIFICATIONS

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Model: P08G

Type: P08G001

September 2009

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COMPREHENSIVE SPECIFICATIONS

Computer Model

Alienware M15x

Dimensions

| | |
|--|--|
| Height | 48.7 mm (1.92 inches) - Front and Back |
| Width | 377.93 mm (14.88 inches) |
| Depth | 308.51 mm (12.15 inches) |
| Weight with 6-cell battery (starting at) | 4.08 kg (9.00 lb) |

NOTE: The weight of your laptop will vary depending on the configuration ordered and the manufacturing variability.

Processor and System Chipset

| | |
|-----------------|---|
| Processor | Intel® Core™ i7 |
| L2 Cache | 256 KB |
| L3 Cache | up to 8 MB |
| Bus clock | 133 MHz |
| System chipset | Mobile Intel PM55 |
| SDRAM bus width | one or two 64-bit channels of DDR3 memory up to 1333MHz |

Processor and System Chipset

| | |
|-----------------------------|---|
| Processor address bus width | 32 bits |
| Processor data width | 64 bits |
| BIOS EPROM | 16 Mbit |
| Graphics bus | PCIe x16 bus supporting x16 PCIe MXM 3.0 graphics cards |
| PCI bus | 32 bits |

Memory

| | |
|--------------------------------|--|
| Connectors | two internally-accessible SODIMM sockets |
| Capacities | 1 GB, 2 GB, and 4 GB modules |
| Memory types | 1067 MHz and 1333 MHz DDR3 |
| Memory configurations possible | 2 GB, 3 GB, 4 GB, and 8 GB |

ExpressCard

| | |
|-----------------|--|
| Interface | supports PCIe and USB 2.0 |
| Connector | one 26-pin ExpressCard slot (54 mm) |
| Cards supported | ExpressCard/34 (34 mm) ExpressCard/54 (54 mm) |

IEEE 1394/Media Card

| | |
|---------------------------------|---|
| IEEE 1394/Media Card controller | Ricoh R5C833 |
| IEEE 1394 interface | compliant with standard IEEE1394a-2000 specification |
| Media Card formats supported | <ul style="list-style-type: none"> ▪ Secure Digital (SD) memory card ▪ Secure Digital High Capacity (SDHC) card ▪ Secure Digital Input/Output (SDIO) card ▪ Multi Media Card (MMC) ▪ Memory Stick ▪ Memory Stick PRO ▪ xD-Picture Card (type - M and type - H) ▪ Hi Density-SD (SDHD) |

Ports and Connectors

| | |
|--------------------------|---|
| IEEE 1394 A | one 4-pin serial connector |
| Network adapter | one RJ45 connector 10/100/1000 Mbps |
| USB | three 4-pin USB 2.0-compliant connectors, including one through eSATA/USB combo connector |
| eSATA | one through eSATA/USB combo connector |
| VGA | one 15-hole connector |
| DisplayPort | one 20-pin connector |
| Audio | one microphone connector, two stereo headphone/speaker connectors |
| ExpressCard | one ExpressCard/54 connector |
| 8-in-1 Media Card Reader | one combo connector |

Communications

| | |
|-----------------|---|
| Network adapter | 10/100/1000 Mbps Ethernet LAN on system board |
| Wireless | <ul style="list-style-type: none"> ▪ WLAN Mini-Card (Half Mini-Card slot) ▪ WPAN, Bluetooth® card (Full Mini-Card slot) |

Video

| | |
|--------------------------|--|
| LCD interface | Low Voltage Differential Signaling (LVDS) |
| External display support | VGA and DisplayPort |
| Video cards | MXM 3.0 Type B compliant cards with individual power budget of 35W and 65W |

Audio

| | |
|-----------------------------|--|
| Type | High-Definition 5.1 Surround Sound Audio |
| Controller | IDT 92HD83 |
| Stereo conversion | 24-bit (analog-to-digital and digital-to-analog) |
| Speaker | dual 8-ohms speakers in both the left and right speaker assembly |
| Internal speaker amplifier | up to 2 W per channel; up to 4 W total power |
| Internal microphone support | dual digital-array microphones in the display assembly |
| Volume controls | program menus and media control buttons |
| Audio connectors | two audio output/headphone connectors and one audio input/microphone connector |
| | The audio input/microphone connector also functions as an output connector in a 5.1-channel surround-sound speaker setup |

Camera

| | |
|------------------------|---|
| Pixel | 2.0 megapixel |
| Video resolution | 320 x 240 - 1600 x 1200 (640 x 480 at 30 fps) |
| Diagonal viewing angle | 66° |

Optical-Drive Storage

| | |
|------------------|---|
| Interface | SATA |
| Type | slot-load drive |
| Drives supported | Blu-ray Disc™ combo, Blu-ray Disc Writer, or DVD+/-RW |

Hard-Drive Storage

| | |
|-----------------------|---|
| Interface | SATA |
| Number of hard drives | one |
| Type | standard portable and solid-state hard-drives |

Display

| | |
|-----------------|---|
| Type (WLED) | <ul style="list-style-type: none"> ▪ 15.6 inch HD+ (1600 x 900) ▪ 15.6 inch FHD (1920 x 1080) |
| Refresh Rate | 60 Hz |
| Operating angle | 0° (closed) to 140° |
| Pixel pitch | 0.2550 mm |
| Controls | brightness can be controlled through keyboard shortcuts |

Keyboard (Backlit)

| | |
|-----------------|---|
| Layouts | U.S. and Canada; Europe; Japan |
| Backlight color | RGB; colors can be changed by invoking the AlienFX® application in the Alienware Command Center. For details, see your <i>Mobile Manual</i> |

Touch pad

| | |
|---|---|
| X/Y position resolution (graphics table mode) | 240 cpi |
| Width | 71.7-mm (2.8-inches) sensor-active area |
| Height | 34.0-mm (1.3-inches) rectangle |

Battery

| | |
|--|---|
| <i>Type and dimensions</i> | |
| 6-cell "smart" lithium ion (57 Whr) | |
| Depth | 53.8 mm (2.12 inches) |
| Height | 21.3 mm (0.84 inches) |
| Width | 213 mm (8.39 inches) |
| Weight | 0.33 kg (0.72 lb) |
| 9-cell "smart" lithium ion (86 Whr) (optional) | |
| Depth | 53.8 mm (2.12 inches) |
| Height | 36.9 mm (1.45 inches) |
| Width | 330 mm (12.99 inches) |
| Weight | 0.5 kg (1.1 lb) |
| Voltage | 12.6 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 |

Battery

Temperature range

| | |
|-------------------|-----------------------------|
| Operating | 0° to 50°C (32° to 122°F) |
| Storage | -20° to 65°C (-4° to 149°F) |
| Coin-cell battery | CR-2032 |

AC Adapter

| | |
|-------------------------|--------------------|
| Type | 150 W |
| Input voltage | 100 - 240 VAC |
| Input current (maximum) | 2.5 A |
| Input frequency | 50 - 60 Hz |
| Output current | 7.7 A (continuous) |
| Output power | 150 W |
| Rated output voltage | 19.5 VDC |

AC Adapter

Dimensions:

| | |
|--------------------------------|-----------------------|
| Height | 25.4 mm (1.0 inches) |
| Width | 154.7 mm (6.1 inches) |
| Length | 25.4 mm (1.0 inches) |
| Weight (without AC power cord) | 0.52 kg (1.14 lb) |

Temperature range:

| | |
|-----------|------------------------------|
| Operating | 0° to 35°C (32° to 95°F) |
| Storage | -40° to 70°C (-40° to 158°F) |

Connector types:

| | |
|--------------|--------------------|
| DC connector | 3 pin, 7.4 mm plug |
| AC connector | 3 pin - C13 |

Computer Environment

Temperature range:

| | |
|-----------|------------------------------|
| Operating | 0° to 35°C (32° to 95°F) |
| Storage | -40° to 65°C (-40° 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 halfsine pluse for storage):

| | |
|-----------|-------|
| Operating | 110 G |
| Storage | 160 G |

Altitude (maximum):

| | |
|-----------|--------------------------------------|
| Operating | -15.2 to 3048 m (-50 to 10,000 ft) |
| Storage | -15.2 to 10,668 m (-50 to 35,000 ft) |

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