

# SPECIFICATIONS

## Gateway 450ROG Notebook

Specifications are subject to change without notice or obligation.

### Processor and Core Logic

#### Processor options

One Intel® Pentium® M CPU

To determine your notebook's processor speed, click **Start, My Computer**, then click **View System Information**. The processor speed is listed.

#### Processor packaging

Intel socketable micro-FCPGA2

#### Level 2 cache

1 MB with Advanced Transfer Cache Architecture

#### Core logic

Intel® 855PM chipset

#### Processor side bus speed

- 400 MHz front side bus
- OR-
- 800 MHz front side bus

#### BIOS

- Phoenix BIOS
- 512 KB Flash ROM
- SMBIOS 2.3 support
- Advanced Configuration and Power Interface 1.0b (ACPI 1.0b) support
- Advanced Power Management 1.2 (APM 1.2)
- Wired for Management 2.0 (WfM 2.0)

### System memory

#### Memory type

266 MHz DDR-SDRAM

#### Memory expansion options

- Two 200-pin industrial standard DDR-SODIMM sockets
- Accepts two PC-2100 SDRAM memory modules
- 1 GB maximum system memory
- No on-board memory

To determine your notebook's memory, click **Start, My Computer**, then click **View System Information**. The memory is listed.

## Video

Graphics controller	<ul style="list-style-type: none"><li>▪ ATI M7 or ATI M9</li><li>▪ 2D hardware acceleration</li><li>▪ 3D rendering acceleration</li></ul>
Video memory	32 MB or 64 MB
LCD display panel	14.1-inch or 15.0-inch active matrix (TFT) LCD color display Maximum panel resolution: 14.1-inch: 1024 × 768 15.0-inch: 1400 × 1050 Maximum color depth: 32-bit (16.7 million colors)
LCD supported video modes	14.1-inch: XGA 15.0-inch: SXGA+
LCD maximum refresh rate	60 Hz
Controls	<ul style="list-style-type: none"><li>▪ Brightness level selectable through FN keys (up, down)</li><li>▪ Icon to display 8 levels of brightness</li><li>▪ Auto dim on battery</li><li>▪ Auto bright on AC power</li></ul>
External video	<ul style="list-style-type: none"><li>▪ Supports dual display and extended desktop</li><li>▪ Integrated TV encoder</li></ul>
External CRT resolutions	Supports standard IBM VGA compatible modes Maximum resolution: 2048 × 1536 × 32-bit colors
External CRT maximum refresh rate	200 Hz
TV out (composite video) jack	Supports NTSC/PAL connection to standard TV monitors with RCA jack
TV out (S-Video) jack	Supports NTSC/PAL connection to standard TV monitors with S-Video jack on optional port replicator
IEEE 1394	<ul style="list-style-type: none"><li>▪ One 4-pin connector</li><li>▪ 100/200/400mps</li><li>▪ Supports video and audio capture</li><li>▪ Software included for motion and still-frame capture</li></ul>

## Audio

Audio chipset	Sigmatel® Soft Audio AC97 rev 2.3 codec (STAC9752)
Sound support	<ul style="list-style-type: none"><li>▪ PCI interface audio</li><li>▪ Multi-stream Direct Sound and Direct Sound 3D acceleration</li><li>▪ SoundBlaster Pro, MIDI, Windows Sound System compatible, MP3, WMA</li><li>▪ S/PDIF output for PCM or AC-3 content via Toslink jack on optional port replicator</li><li>▪ PCI Power Management Interface (PPMI) 1.1 compliant</li></ul> NOTE: This notebook does not have an internal microphone.
Digital DVD audio	Provides full 5.1 channel Dolby Digital output (AC-3) from DVD decoder through Toslink optical S/PDIF jack on optional port replicator.
Volume controls	<ul style="list-style-type: none"><li>▪ Volume control keys on keyboard</li><li>▪ Software control provided through Windows</li></ul>
Internal speakers	<ul style="list-style-type: none"><li>▪ Stereo speakers built into front of notebook</li><li>▪ 1.5 W maximum output</li></ul>
Audio jacks	<ul style="list-style-type: none"><li>▪ Stereo headphone output</li><li>▪ Stereo line input</li><li>▪ Monophonic microphone input</li></ul>

## Communications

Modem features	<ul style="list-style-type: none"><li>▪ Integrated V.92/56K data/fax modem</li><li>▪ Uses the RJ-11 jack on the back of the notebook</li><li>▪ Supports Wake on Ring from S3 power mode</li></ul>
10/100/1000 Mbps Ethernet interface features	<ul style="list-style-type: none"><li>▪ Integrated 1000BASE-T, 100BASE-TX, and 10BASE-T (802.3, 802.3u, and 802.3ab) Ethernet interface</li><li>▪ Uses the RJ-45 jack on the back of the notebook</li><li>▪ Supports Wake on LAN from S3 power mode</li></ul>

Wireless Ethernet interface features  
(Factory installed option)

- Intel® PRO/Wireless IEEE 802.11b network card embedded in the notebook  
-OR-
- Intel® PRO/Wireless IEEE 802.11b/g network card embedded in the notebook  
-OR-
- Broadcom BCM94306 IEEE802.11g network card embedded in the notebook  
-OR-
- Broadcom BCM94300 IEEE802.11a/g network card embedded in the notebook

**Antenna:** Uses factory-installed internal antenna assembly

**Operating channels:** 11 selectable channels

**Security:** 128 and 64 bit WEP encryption

**Operating Frequency**

- 2.4 GHz Direct Sequence Spread Spectrum (IEEE 802.11b and IEEE 802.11g)
- 5.0 GHz (IEEE 802.11a)

**Maximum Data Rate**

- 54 Mbps (IEEE802.11g and IEEE 802.11a)
- 11 Mbps (IEEE802.11b)

**Input/Output (I/O)**

Keyboard

- U.S. English keyboard
- Full-sized 86-keys
- 19 mm × 19 mm key pitch
- 3.0 mm keystroke

Pointing device

- Gateway EZ-Pad™ touchpad
- 4-button design

Multifunction buttons

Four “hot keys” that launch e-mail, Web browser, help application, and My Computer

LED status indicators

- Caps lock
- PAD lock
- Scroll lock
- Hard drive access
- Module bay access/bay swap
- Power/Suspend
- Battery status

Input/Output (I/O) ports

- Two USB 2.0 (4-pin)
- High-speed serial
- Parallel (bi-directional, EPP, ECP)
- IEEE 1394 (4-pin)
- V.92, 56K Modem (RJ-11)
- 10/100 Ethernet (RJ-45)
- External monitor (VGA)
- TV out (NTSC/PAL composite video)
- Stereo headphone output
- Stereo line input
- Monophonic microphone input
- PS/2 keyboard or mouse
- PC Card sockets (two Type II or one Type III)
- Docking port
- DC input

PCMCIA

- Accepts two Type II or one Type III device
  - Ricoh R5C554 controller
- NOTE: This notebook does not support Zoom Video.

**Docking solution**

Type

Port replicator

Docking supported

- Hot dock
- Warm dock
- Cold dock

Input/Output (I/O) ports

- Two USB 2.0 (4-pin)
- High-speed serial
- Parallel
- Modem (RJ-11)
- Ethernet (RJ-45)
- External monitor (VGA)
- S-Video TV out
- S/PDIF digital audio out
- Stereo headphone output
- Analog audio line input (stereo)
- Two PS/2
- Docking port
- DC input

Security

Kensington lock loop

## Storage

Hard drive controller

Supports up to Ultra DMA 100 and up to PIO mode 4

Hard drive

- User removable
- 2.5-inch diameter
- 9.5 mm height

To find the hard drive capacity, click **Start**, then click **My Computer**. Right-click the drive letter, then click **Properties**. The drive's capacity and available space appear. If the drive has multiple partitions (for example, C: and D:), add the capacities of each partition to determine the drive's total capacity.

Super I/O controller

- NS PC87391 LPC super I/O controller
- Diskette drive controller
- IEEE 1284 compliant parallel port
- Serial port

## Modular bay

One modular bay is available on the notebook. The modules are hot-swappable.

### **Optical Drive**

Available optical drives include:

- CD
- DVD
- Combination DVD/CD-RW
- DVD-RW/CD-RW

To determine the type of drive in a bay, examine the drive tray's plastic cover. A CD Compact Disc logo indicates a CD drive, a DVD logo indicates a DVD drive, a DVD logo in combination with a CD-R/RW logo indicates a DVD drive that also is a recordable/rewritable CD drive, and a DVD-ROM/R/RW logo in combination with a CD-R/RW logo indicates a recordable/rewritable DVD drive that also is a recordable/rewritable CD drive.

### **Second Hard Drive**

- 2.5-inch diameter
- 12.7 mm or 9.5 mm high

### **Diskette Drive**

- 12.7 mm high
- 3.5-inch diskettes
- 720K/1.2M/1.44M support

### **Memory Card Reader**

Supports the following card types:

- CompactFlash<sup>®</sup>
- IBM Microdrive<sup>™</sup>
- Memory Stick<sup>®</sup>
- MultiMediaCard<sup>™</sup>
- Secure Digital<sup>™</sup>
- SmartMedia<sup>™</sup>

### **Secondary Battery**

- Removable six-cell prismatic Lithium Ion battery pack
- 3.4 Ah
- 11.1 V nominal
- 37.74 Wh

## Power

Intelligent charger	Supports dynamic charge current to achieve the best charge performance
AC adapter	<ul style="list-style-type: none"><li>▪ 19 VDC, 4.2A, 80 W output</li><li>-OR-</li><li>▪ 19 VDC, 4.74A, 90 W output</li><li>▪ Automatically adjusts for 100 to 240 VAC, 50 to 60 Hz power source</li><li>▪ Three-wire design</li><li>▪ Includes power LED</li></ul>
Battery type	<p><b>Main</b></p> <ul style="list-style-type: none"><li>▪ Removable eight or six-cell Lithium Ion battery pack</li><li>▪ Embedded controller inside to support smart battery</li></ul> <p><b>Secondary</b></p> <ul style="list-style-type: none"><li>▪ Removable six-cell prismatic Lithium Ion battery pack</li></ul>
Battery capacity	<p><b>Main</b></p> <p>8-cell:</p> <ul style="list-style-type: none"><li>▪ 4.2 Ah</li><li>▪ 14.8 V nominal</li><li>▪ 62.16 Wh</li></ul> <p>6-cell:</p> <ul style="list-style-type: none"><li>▪ 3.8 Ah</li><li>▪ 11.1 V nominal</li><li>▪ 42.18 Wh</li></ul> <p><b>Secondary</b></p> <ul style="list-style-type: none"><li>▪ 3.4 Ah</li><li>▪ 11.1 V nominal</li><li>▪ 37.74 Wh</li></ul> <p>Battery life varies depending on configuration, programs, power management settings, and features used. Recharge time varies, depending on usage.</p>
Power management	<ul style="list-style-type: none"><li>▪ Advanced Configuration and Power Interface 1.0b or later (ACPI 1.0b or later) support</li><li>▪ SMBIOS 2.3</li><li>▪ PC 2001 compliant</li><li>▪ CPU supports Intel® Speedstep™ technology</li></ul>
Controls	<ul style="list-style-type: none"><li>▪ Keyboard-activated pop-up display gives battery charge as a percentage remaining</li><li>▪ Icon on taskbar shows battery charge as a percentage remaining</li><li>▪ Battery meter on battery</li></ul>
Power switch	Supports Power On/Off, Standby/Resume, Hibernate, Shutdown



System weight	<b>15.0-inch display</b> (includes DVD drive and 6-cell battery) ~6.11 lbs. ~2.77 kg
	<b>14.1-inch display</b> (includes DVD drive and 6-cell battery) ~5.64 lbs. ~2.56 kg
	Weight varies depending on configuration.
AC adapter weight	13 ounces (370 g)

**Environment**

Operating temperature	41°F to 95°F (5°C to 35°C)
Storage temperature	-4°F to 140°F (-20°C to 60°C)
Operating humidity	20% to 80% relative humidity; no condensation
Storage humidity	10% to 90% relative humidity; no condensation
Operating altitude, maximum	8,000 feet at 59°F (2,438 meters at 15°C)
Storage altitude, maximum	12,000 feet (3,658 m)

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