



## RAGE™ MOBILITY™ and RAGE™ MOBILITY™ M1 Product Snapshots

The RAGE™ MOBILITY™ M and RAGE™ MOBILITY™ M1, ATI's third generation of graphics and multimedia accelerators, offer an extensive feature set, up to 8MB of integrated memory, and low power consumption while delivering outstanding performance.

### Package Specifications

- **Package, Size:** 328 BGA, **MOBILITY™ M:** 27mm x 27mm, **MOBILITY™ M1:** 31mm x 31mm

### Graphics Processor Specifications

- **Process technology, Core Voltage:** 0.25um, 2.5V
- **Graphics Clock:** 83 MHz

### Memory Specifications

- **Memory Type:** NEC 1MBx16 SDRAM (M & M1); Micron 1MBx16 SDRAM (M1)
- **I/O Type, VDDC:** SSTL, 3.3V
- **Memory Clock, Max Memory Path:** 125 MHz clock, 64 bit width
- **Maximum Memory Configuration:** 8 MB (Mob. M = 4MB int. + 4MB ext., Mob. M1 = 8MB int.)

### Bus Specifications

- **AGP bus support/ PCI bus support:** AGP 2X (3.3V) / PCI 2.1

### Outputs

- **CRT1 (Primary):** Triple 8-bit palette DAC, 230MHz
- **CRT1 (Secondary):** Triple 8-bit palette DAC
- **Integrated LVDS:**
  - Dual Channel LVDS up to 112 MHz per channel
  - Supports 18 bit and 24 bit modes for both single and dual channel LVDS.
  - TFT & DSTN Panel support
- **Integrated TV encoder:** Shares the Secondary DAC
- **DVO (TTL):** Supports 18/24 bit SDR mode
- **Supported Display Combinations:** LVDS + CRT/TV

### Resolution Support

- **Max 2D/3D resolution:** 8MB: 1600x1200/1280x1024; 4MB: 1280x1024/800x600
- **Max color depth:** 16.7M Colors
- **LVDS, TV-out:** 1280x1024, 1024x768

### Driver Support

- Win 98/ME/2000/XP/NT, Linux (Please see your technical contact for alternate OS support)

### Video Support

- Video on graphics overlay, color space conversion (YUV to RGB)
- MPEG-2 hardware decode acceleration

### Brief Overview of 2D/3D Support

- Hardware acceleration of BitBlit, Line Draw, Polygon/Rectangle fill, Bit Masking
- Complete 3D primitive support, edge anti-aliasing, gouraud, specular shading, texture mapping



## RAGE™ MOBILITY™ and RAGE™ MOBILITY™ M1 (Continued)

Power Consumption			
Test	Mode	Average Power (W)	
		LVDS Panel Only	LVDS Panel + CRT + TV
Static Display	1024x768x16 bpp 60 Hz AGP 2x	0.807	1.224
2D + 3D + Video In		1.372	1.879
3D Winbench 99		1.209	Not measured
Standby	Standby	0.327	0.330
Suspend	Suspend	0.00483	0.00483
Maximum Power (W)			
Test	Mode	Maximum Power (W)	
		LVDS Panel Only	LVDS Panel + CRT + TV
2D +3D + Video In	1024x768x16 bpp	1.472	1.952
3D Winbench 99	60 Hz AGP 2x	1.626	Not measured

### Block Diagram

