

G31M-VS

Intel® G31+ ICH7 Chipsets

ASRock®
www.asrock.com



FSB
1333
MHz

DDR2
800



Product Brief <<<<

- Supports FSB1333/1066/800 MHz
- Intel® Graphics Media Accelerator 3100,
DirectX 9.0, Max. shared memory 384MB
- Supports ASRock Instant Boot
- Supports Smart BIOS, ASRock OC Tuner
- Supports Intelligent Energy Saver

Detail Specification <<<

Platform	- Micro ATX Form Factor: 8.8-in x 6.7-in, 22.4 cm x 17.0 cm
CPU	- LGA 775 for Intel® Dual Core Core™ 2 Extreme / Core™ 2 Duo / Pentium® Dual Core / Celeron® Dual Core / Celeron®, supporting Dual Core Wolfdale processors - Supports CPU power up to 65W - Supports FSB1333/1066/800 MHz - Supports Hyper-Threading Technology - Supports Untied Overclocking Technology - Supports EM64T CPU
Chipset	- Northbridge: Intel® G31 - Southbridge: Intel® ICH7
Memory	- Dual Channel DDR2 memory technology - 2 x DDR2 DIMM slots - Supports DDR2 800/667 non-ECC, un-buffered memory - Max. capacity of system memory: 8GB
Expansion Slot	- 1 x PCI Express x16 slot - 1 x PCI slot
Graphics	- Intel® Graphics Media Accelerator 3100 - Pixel Shader 2.0, DirectX 9.0 - Max. shared memory 384MB
Audio	- 5.1 CH Windows® Vista™ Premium Level HD Audio (Realtek ALC662 Audio Codec)
LAN	- Realtek PCIEx1 LAN 8102EL - Speed: 10/100 Ethernet - Supports Wake-On-LAN
Rear Panel I/O	I/O Panel - 1 x PS/2 Mouse Port - 1 x PS/2 Keyboard Port - 1 x Serial Port: COM1 - 1 x VGA Port - 4 x Ready-to-Use USB 2.0 Ports - 1 x RJ-45 LAN Port with LED (ACT/LINK LED and SPEED LED) - HD Audio Jack: Line in / Front Speaker / Microphone
Connector	- 2 x SATAII 3.0 Gb/s connectors (No support for RAID and "Hot Plug" functions) - 1 x ATA100 IDE connector (supports 2 x IDE devices) - 1 x Print port header - CPU/Chassis FAN connector - 24 pin ATX power connector - 4 pin 12V power connector - CD in header - Front panel audio connector - 2 x USB 2.0 headers (support 4 USB 2.0 ports)
BIOS Feature	- 4Mb AMI BIOS - AMI Legal BIOS - Supports "Plug and Play" - ACPI 1.1 Compliance Wake Up Events - Supports jumperfree - SMBIOS 2.3.1 Support - VCCM Voltage Multi-adjustment - Supports Smart BIOS
Support CD	- Drivers, Utilities, AntiVirus Software (Trial Version)
Unique Feature	- ASRock OC Tuner - Intelligent Energy Saver - Instant Boot - Hybrid Booster: - CPU Frequency Stepless Control - ASRock U-COP - Boot Failure Guard (B.F.G.)
Hardware Monitor	- CPU Temperature Sensing - Chassis Temperature Sensing - CPU Fan Tachometer - Chassis Fan Tachometer - CPU Quiet Fan - Voltage Monitoring: +12V, +5V, +3.3V, CPU Vcore
OS	- Microsoft® Windows® 2000 / XP / XP 64-bit / Vista™ / Vista™ 64-bit compliant
Certifications	- FCC, CE
Accessories	- Quick Installation Guide, Support CD, I/O Shield - ATA 100 Cable (Optional) - 1 x SATA Data Cable (Optional) - 1 x SATA 1 to 1 Power Cable (Optional)

The specification is subject to change without notice. The brand and product names are trademarks of their respective companies. Any configuration other than original product specification is not guaranteed.

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ASRock Instant Boot

ASRock Instant Boot is a new feature invented exclusively by ASRock. It can boot up system in an amazing speed, which is 10 times faster than traditional boot up. For home users or office PC users, ASRock Instant Boot can also guarantee a clean Windows OS, and consumed less power! For details:

<http://www.asrock.com/feature/InstantBoot/index.asp>

* This function is applicable ONLY to single user that does not secure ID and Password to their systems.

* The boot up time depends on the hardware configuration.

Instant Boot Interface

This function is designed with two main options:

- **Enable Instant Boot**

Fast Mode: It takes only 3 to 4 seconds to boot up the system. You may start using your computer, running Office, browsing internet and even MSN instantly.

Regular Mode: It only takes half of the traditional boot-up time to start the system. The boot up experience is safe and fast.

- **Disable Instant Boot**

Instant Boot can also be disabled when you do not want to use this application.

Note: The actual boot up time is subject to the different models and configurations.



10 Times Faster, Only 4 Secs to Boot Up to Windows!

ASRock YouTube

<http://tw.youtube.com/watch?v=BucljXZVxXo>



Pro and Cons of various shut down modes

From this sum up table, we can find that ASRock Instant Boot not only excels in the Boot Up speed (3~4 sec.), it also provides clean OS and saves the most power energy.

	No Shut Down	Traditional boot up	S3	S4	Instant Boot	
					Fast Mode	Regular Mode
Boot Up Time	Best ●	Worse ● 50~60 sec	Best ● 3~4 sec.	Good ● 20~22 sec.	Best ● 3~4 sec.	Good ● 20~22 sec.
Cleanliness of OS	Fair ● Accumulated garbage data	Best ● Clean	Fair ● Accumulated garbage data	Fair ● Accumulated garbage data	Best ● Clean	Best ● Clean
Power Consumption (Light loading)	Worse ● 60W~100W	Best ● 1W~3W	Best ● 1W~3W	Best ● 1W~3W	Best ● 1W~3W	Best ● 1W~3W

● Best ● Good ● Fair ● Worse

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Overclocking Design

ASRock OC Tuner:

ASRock OC Tuner is a user-friendly and untied tool which allows you to guard your system by hardware monitor function and overclock your hardware devices to get the best system performance

- System Health
- Hardware Monitor
- Overclocking
- Voltage Control



Energy Saving :

Supports ASRock Intelligent Energy Saver (I.E.S)



Smart BIOS:

The Smart BIOS function can be found in the BIOS Setup Utility when you are setting up the optimal configuration for your system. It can facilitate the setting things by some default BIOS settings. Users may just select the BIOS mode that is most suitable to them.

