



### Overview:

The **VRM-SBC-81871V2FG** is a Pentium M Single Board Computer with DDR/CRT/Triple Gigabit LAN.

### Features:

- Intel® Pentium®M processor supports FSB up to 400MHz
- Intel® E7501 chipset supports PCI-X
- Two 184-pin DDR DIMM sockets support up to 4GB Register ECC memory
- Onboard ATI RageXL Graphic Integrated 8MB RAM
- Onboard triple LAN, each supports 10/100/1000BASE-T (One port can support copper, another can support multi-mode fibre, based on PCI-X bus)
- Onboard Mini PCI connector for flexible feature expansion
- ITE 8888 PCI-ISA bridge for ISA expansions with ISA high drive support
- Supports USB 2.0 6 ports
- Support PCI-X devices.



### Specifications:

- **Processor/Cache** – Intel® Pentium M processors up to-date frequency w/L2 cache integrated in CPU up to 1.6GHz and latest
- **Chipset** – Intel® E7501 chipset supports PCI-X. Intel® FW82801DB (ICH4)
- **System Memory**- Two 184-pin DDR DIMMs sockets support max. up to 4GB Register ECC memory
- **BIOS**- Award 4Mbit PnP Flash BIOS
- **EIDE**- Two ATA-100 Channels for a total of four IDE devices
- **Super I/O**- Controller: Winbond W83627HF-AW
  - Serial Ports: Two asynchronous, 1 x RS-232 and 1 x RS-232/422/485, 2 x 10-pin
  - Parallel Port: One bi-directional with ECP/EPP/SPP support, 26-pin
  - Floppy Controller: Support for two drives (1.44MB for each)
  - Keyboard/Mouse: 6-pin Mini-DIN connector for mouse or keyboard
- **USB** – Six USB ports (2.0)
- **VGA**- ATI RageXL Graphic Chipset. Graphic Memory: 8MB RAM
- **LAN**- LAN1 and LAN2: Intel® 82546 Ethernet controller support 10/100/1000MB (for fibre using small form factor, multiple mode 850nm fibre transceiver. Data link up to 500m by 50/125um MMF; link up to 300m by 62.5/125um MMF. It can support copper also). LAN3: Intel® 82540 Ethernet Controller (32-bit) support 10/100/1000Mb. Teaming feature support: Load sharing, load balancing and fail over. Wake on LAN support.
- **Connectors**- Mini-DIN: 1 x PS/2 Mouse and PS/2 Keyboard. Mini-PCI: 1 x Mini-PCI connector. RJ-45: 2-port for V2G. Box-header: 1 x CRT (2x8-pin); 2 x Serial Ports (2x 5-pin); 1 x FDD (2x17-pin). 2 x EIDE (2 x 20-pin); 1 x Parallel Port (2x 13-pin). Pin header: 6 x USB (2x5-pin). Wafer: 1 x Keyboard (1 x 5-pin); 1 x Mouse (1 x 5-pin). Power Connector: 1 x (6-pin) wafer for 5Vsb.
- **SSD**- DiskOnChip® support
- **Hardware Monitoring**- Controller: Winbond W83627HF-AW. Detection of CPU temperature, System temperature, Power failure and Fan speed.
- **Watchdog Timer**- System reset or non-maskable interrupt software programmable time interval and jumper selectable (64-level)
- **Other Features**- ITE 8888 PCI-ISA Bridge for ISA expansion solutions. Keyboard Wake-up via ATX power supply
- **OS Compatibility**- PC and MS-DOS; Windows 98; Windows NT 4.0, Windows 2000, Windows XP, Novell Netware Linux Red Hat
- **Mechanical**- 338 x 122 mm (13.3" x 4.8"). Compliant to PICMG Rev 2.0 standard (support 64-bit backplane)
- **Environmental**- Operating Temperature: 0°C to 60°C (32° to 140°F). Relative Humidity: 95%, non-condensing at temperature 40°C or 104°F



**Ordering options:**

- **VRM-SBC-81871V2G:** HISA, VGA, SCSI option, Gigabit x 2.
- **VRM-SBC-81871V2F:** (with MoQ restriction): HISA, VGA, SCSI Option, Fibre x 2.
- **VRM-SBC-81871VG:** HISA, VGA, SCSI Option, Gigabit x 1.
- **VRM-SBC-81871VE:** HISA, VGA, SCSI Option, 10/100 Mbps x 1.
- **VRM-SBC-81871V2FG:** (with MoQ restriction): HISA, VGA, SCSI Option, Gigabit x 3 (2x fiber; 1 x copper).
- **VRM-SBC-81871V2FE:** (with MoQ restriction): HISA, VGA, SCSI Option, 10/100Mbps x 1, Gigabit x 2.

**Accessory Options:**

- **USB Cable**
- **VRM-8930:** Mini PCI Ultra SCSI module
- **VRM-8931A:** Mini PCI IDE controller module
- **VRM-89330:** Mini PCI Gigabit Ethernet module
- **VRM-89331:** Mini PCI Fast Ethernet module
- **VRM-92210:** Mini PCI IEEE 1394 module
- **VRM-92500:** Mini PCI network DES module.