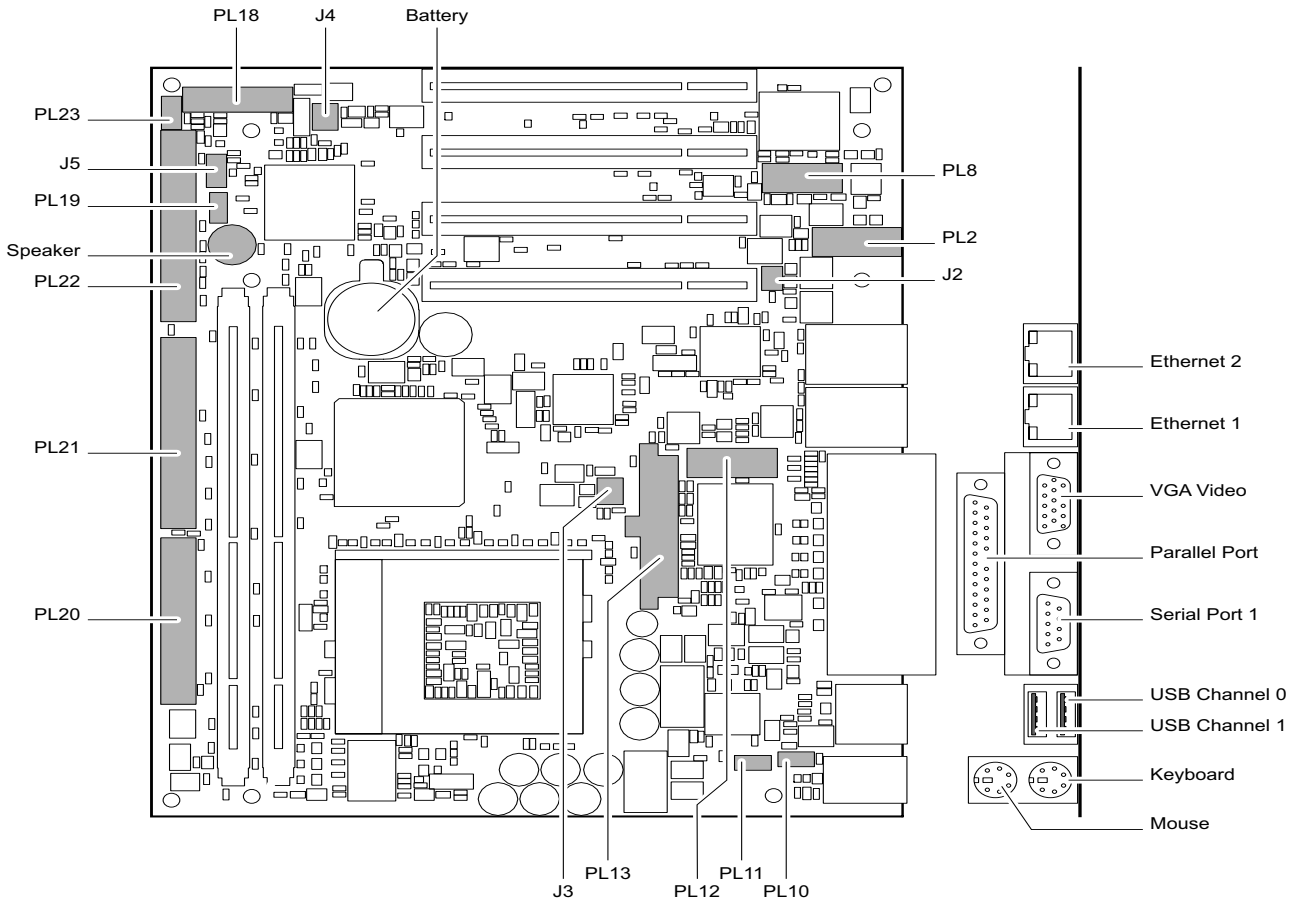


Embedded Motherboards

The following information is provided to help you quickly configure, install and operate your Rev1 RadiSys FM810 micro/flexATX motherboard. Refer to the product manual for more detailed information.

The RadiSys FM810 is an ATX-family motherboard that meets both the microATX and flexATX form factor specifications. It is based around Intel® PGA and FC-PGA Celeron™ and FC-PGA Pentium® III processors and an Intel® 810 chipset. Its features include integrated video, riser support on slot 2, system monitoring and dual Ethernet on a board measuring 9.0 x 7.5 inches.



| | | | |
|------|---|------|--------------------------------------|
| J2 | Enable 3-Slot Riser Support for Slot 2* | PL12 | GPIO Header |
| J3 | Processor Fan | PL13 | ATX Power Connector |
| J4 | System Fan | PL18 | Front Panel Header |
| J5 | Operating Mode Jumper | PL19 | ISA Bridge Support Header (Optional) |
| PL2 | External LAN Status LED Header | PL20 | Floppy Diskette Connector |
| PL8 | Serial Port 2 Header | PL21 | Secondary IDE Connector |
| PL10 | 2mm Keyboard Header | PL22 | Primary IDE Connector |
| PL11 | 2mm Mouse Header | PL23 | 3-Pin Power LED Header |

*Note: Riser support is enabled when the jumper is fitted.

Quick Start

To begin operating your FM810 motherboard, perform the following:

- Ensure that the jumper settings match your requirements.
- Attach all necessary peripheral devices to the appropriate headers and connections on the board using the information provided on the following page.
- Power on the system.
- Run the BIOS setup utility (press <F2> during POST) if you need to change any settings to match your requirements.



To avoid damage or injury, always exercise the following precautions when handling this product:

- Use a grounding wrist strap or other static dissipating device.
- Power off the system.
- Disconnect all power leads.

BIOS

Configuration of the motherboard, in the majority of cases, is achieved through BIOS settings. These can be viewed and modified using the BIOS setup utility that can be started by pressing the <F2> key during POST. The BIOS also has the facility to display a custom logo and to set customizable defaults. The instructions to create these are in the product manual.


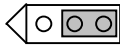
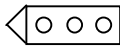
BIOS updates will be made available for download during the course of the BIOS development and will be posted on the download page on the RadiSys Web site (<http://www.radisys.com>).

Technical and Product Support

BIOS updates, device drivers, product and technical support documentation are available for download from the RadiSys Web site. Click on 'Support and Service' to access a link to the appropriate page. Documentation is available in Adobe® Acrobat® .PDF format and may be viewed and printed using Acrobat® Reader™ software. The latest BIOS and device driver files will be available for download in .ZIP format. Current documentation and driver files are also supplied on a CD-ROM that is available upon request.

Note: It is recommended that only the drivers supplied by RadiSys are used as those posted on the device manufacturer's Web sites are unlikely to function correctly.

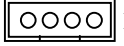
Connector Descriptions


| Operating Mode Jumper (J5) | | |
|----------------------------|--|--|
| Mode | Jumper Setting | Configuration |
| Normal | 1 – 2  | The BIOS uses the current configuration information and passwords for booting. |
| Configure | 2 – 3  | After POST is run, Setup is run automatically using BIOS defaults. |
| Recovery | None  | The BIOS attempts to recover the BIOS configuration using a recovery diskette. |

| External LAN Status LED's (PL2) | | | |
|---------------------------------|--------------------------|-----|-------------------------|
| Pin | Signal | Pin | Signal |
| 1 | 150Ω pull up to +3.3Vsby | 2 | Ethernet 2 Activity LED |
| 3 | Key | 4 | Ethernet 2 Link LED |
| 5 | 150Ω pull up to +3.3Vsby | 6 | Ethernet 2 Speed LED |
| 7 | 150Ω pull up to +3.3Vsby | 8 | Ethernet 1 Activity LED |
| 9 | 150Ω pull up to +3.3Vsby | 10 | Ethernet 1 Link LED |
| 11 | 150Ω pull up to +3.3Vsby | 12 | Ethernet 1 Speed LED |

| GPIO Header (PL12) | | | |
|--------------------|--------|-----|--------|
| Pin | Signal | Pin | Signal |
| 1 | GPIO20 | 2 | GPIO21 |
| 3 | GPIO22 | 4 | GPIO23 |
| 5 | GPIO24 | 6 | GPIO25 |
| 7 | GPIO26 | 8 | GPIO27 |
| 9 | Key | 10 | Ground |
| 11 | +5V | 12 | +3.3V |

| Front Panel Header (PL18) | | | |
|---------------------------|---------------------|-----|--------------------|
| Pin | Signal | Pin | Signal |
| 1 | 330Ω pull up to +5V | 2 | Power LED (Green) |
| 3 | HDD Activity LED# | 4 | Power LED (Yellow) |
| 5 | Ground | 6 | Power Switch |
| 7 | Reset Switch | 8 | Ground |
| 9 | +5V | 10 | +5V |
| 11 | Infra Red RxD | 12 | Speaker |
| 13 | Ground | 14 | No Pin (Key) |
| 15 | Infra Red TxD | 16 | Speaker |
| 17 | Not Used | 18 | Tamper |
| 19 | Not Used | 20 | Ground |

| ISA Bridge Support Header (PL19)-Optional | | |
|---|-------------|---|
| Pin | Signal | Connector |
| 1 | BRIDGE_NOGO |  |
| 2 | PCI REQ# | |
| 3 | PCI GNT# | |
| 4 | SERIRQ | |

| Keyboard & Mouse Headers (PL10 & 11) | | |
|--------------------------------------|------------|---|
| Pin | Signal | Connector |
| 1 | 5V (Fused) |  |
| 2 | Data | |
| 3 | GND | |
| 4 | Clock | |

| Serial Port 2 (PL8) | | | |
|---------------------|--------|-----|--------|
| Pin | Signal | Pin | Signal |
| 1 | DCD | 2 | DSR |
| 3 | RXD | 4 | RTS |
| 5 | TXD | 6 | CTS |
| 7 | DTR | 8 | RI |
| 9 | Ground | 10 | Key |

| 3-Pin Power LED Header (PL23) | |
|-------------------------------|------------|
| Pin | Signal |
| 1 | Green LED |
| 2 | Not Used |
| 3 | Yellow LED |