

Magnum Single Board Computer

Installing Your Computer Board

If your Single Board Computer is supplied with additional components they are packed separately, to avoid any possible damage during transportation. Before proceeding further please read the whole of this sheet.

Electro-Static Discharge

Your Single Board Computer is susceptible to damage by electrostatic discharges. In order to avoid damage, you should work at an anti-static bench and observe normal anti-static precautions. Wear an anti-static wrist strap connected to an earth point *before* opening any packaging. Keep all items in their anti-static packing until required.

If your computer board was supplied with additional components, you will also have a disposable wrist strap. Remove the protective paper from the end with the visible copper strip, and stick this firmly to any available earthed metalwork or chassis. Remove the protective paper from the other end, hold the free end against the bare wrist with the adhesive uppermost and wrap the tape firmly around the wrist and stick it down. The strap can be used only a limited number of times.

Where a wrist strap is not available, discharge any static charge you may have built-up by touching an earth point.

Avoid any further movement that could build up another static charge. Touch an earth point from time to time to avoid further build-up, and remove the items from their anti-static bags only when required.

Battery

Your Single Board Computer contains a battery to support the CMOS memory and real-time clock. Take care not to short circuit the battery by placing the board on conducting surfaces. Shorting the battery will reduce its life, and may be hazardous.

Fitting the ATA-Disk Chip Module

Note that the ATA-Disk Chip module may be permanently damaged if it is installed incorrectly. Align pin 1 of the module with pin 1 of the on-board socket. Push the module into the socket carefully until it is fully seated. Check that it is secure and that there are no bent pins. Refer to the User Manual on the CD-ROM for the software configuration.

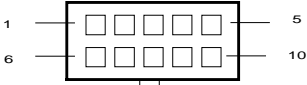
Installing and Cooling the Board

The board is now ready to be installed, but given that the Magnum is intended for embedded applications, consideration should be given to cooling the board. Since the applications are diverse, there is no single preferred method of cooling, however, the Magnum comes supplied with two heatsinks already attached. In common with all electronic equipment, the cooler the board runs, the greater the reliability. The board may be cooled by a common fan, which cools other items within its enclosure, or if required, by upgrading the CPU heatsink with a dedicated fan-heatsink assembly. Remember that heatsinks need free air in order to dissipate the heat. Pay particular attention to items such as cables or other items of equipment that could impede the airflow.

Transportation

If the processor board is to be transported, the units must be enclosed in anti-static bags.

Avoid the black conductive plastic type of anti-static bags for the processor - they will discharge the off-board battery if it is connected. Use the clear metallised type as supplied.

P21: Power Connector		Pin	Description	Pin	Description
1		1	+5V	6	+5V
2		2	0V	7	0V
3		3	3V3	8	0V
4		4	PSON#	9	+5V _{STBY}
5		5	-12V	10	+12V

Note: If On/Off Switch is not fitted to P13, then a jumper must be applied to J3, which is adjacent to P21 in order for the SBPC to power up.