

# BCT-ETX-C3 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.

### 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. The BCT-ETX-C3 Single Board Computer is designed such that it will not operate without a carrier board, which will provide all the connections for Power and Signals. Refer to the relevant information on your carrier board for details on how to connect together.

Given that the BCT-ETX-C3 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. To aid in the final design, the BCT-ETX-C3 Processor Board is supplied with an Heat Spreader to allow for efficient transfer of heat from the Processor and other components to the final cooling solution eg Heatsink.

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 by a dedicated heatsink or 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. If in doubt, fix a self-adhesive fan-heatsink assembly to the Heat Spreader. These generally have their own instructions.

### Transportation

If the processor board is to be transported individually, it 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.