



## PC104 + controller board for neo natal ventilation unit

### Background

SLE is a recognised world leader in the design and manufacture of Diagnostic and Life Support electro-medical solutions. They have built up a specific expertise in neo natal intensive care, establishing a reputation for excellence in this field.

Since marketing the Newborn 150 in 1981, SLE has evolved into a market leader in infant ventilation systems. Today, you will find SLE ventilators helping newborns in hospitals across the world, Blue Chip Technology is part of this success story.

### System Requirements

Computerised electro-medical solutions play a strategic role in modern healthcare. The challenge for solution providers is to make the equipment completely



accessible for the medical professional, so they can focus on the patient instead of the user manual. In terms of technology, this translates into equipment with intuitive user interfaces, compact designs and easy to use feature sets.

In terms of embedded design, the core computer must be small, with graphics capabilities and low power. Product reliability and support are givens. Blue Chip Technology's Micron PC104 board was the perfect choice for SLE's latest generation 4000 and 5000 ventilation systems.



## System Description

In this build, the Micron is clocked at 266MHz, running ROM DOS. The single board computer manages the ventilator graphical user interface, handling display input and output. Using CANbus, the Micron interfaces into the dual redundant control boards, which operate system pneumatics.

Blue Chip Technology's Micron is a Pentium class PC/104 + form factor single board computer that combines high performance graphics, ethernet, audio, USB and a host of other functions. The integrated Trident CyberBlade AGP (x2) Graphics controller provides CRT resolutions up to 1600 x 1200 and LCD resolutions up to 1024 x 768.

Why Blue Chip Technology?

Blue Chip Technology is in the pretty unique position of designing and manufacturing in the UK. This situation affords the greatest degree of product control and customer care. In SLE's case, the board was supplied with a custom BIOS containing default settings, company logo'd splash screen and display configuration.

"We consider Blue Chip Technology a hassle free supplier," commented Paul Corcoran, SLE Buyer, "no issues, no trouble and full support when it's needed."

## Conclusion

The Series 4000 and 5000 are the next generation of SLE ventilators. Well received across the sector, production volume is being ramped up to support increased sales. The SLE 5000 will be one of the key products featured at Medica 2004.

