



Industrial Computer controller for broadcast automation

Background

Pro-Bel introduced its first router in 1977, over 25 years later and it has become a leading innovator in the international broadcast, post-production and, cable & satellite communities. The extensive Pro-Bel portfolio has international recognition and will play an integral role in the digital broadcast evolution.

Pro-Bel's integrated solutions handle the transport, control and playout of video and audio content. The company's routing and control equipment carries video and audio signals whilst additional 'glue' products manage, extract, convert and mix different signal formats. In the playout arena, broadcasters can use a manual master control switcher or take advantage of Pro-Bel's automation solutions. Interfacing with stored content from a variety of sources, this software executes a pre-defined play schedule, maintaining programme transitions and aspect ratios.

Software automation solutions represent a strategic growth area for Pro-Bel. The reliability of the supporting hardware platform is crucial to the overall system performance.

System Requirements

Pro-Bel's revolutionary Automation Software suite of Morpheus, Meridian, Sextant and Compass needs to run on dedicated hardware controllers. The computer



Morpheus Automation Software

hardware sits behind a GUI interface and manages programme material availability, tracking and retrieval against a broadcast play schedule. The performance of this controller is pivotal in ensuring the right programme content reaches the viewer at the scheduled time.

Downtime is not an option in a broadcast environment. Consequently, Pro-Bel specified an industrial grade computer system, which has been specifically engineered for absolute reliability in mission critical applications. The system would also need to be rugged enough to sit in mobile broadcast vans all over the world.

System Description

Pro-Bel selected the Blue Chip 2U Icon industrial computer as the hardware controller for their automation software suite.

The PCI/ISA combination backplane is fitted with the Wildcat Pentium® slot CPU card - also designed and manufactured by Blue Chip Technology. The Icon offers IP54 front panel protection and has a fully lockable drive bay door, which also provides access to a keyboard connector, power stand by switch and a reset switch.

The drive cage provides shock mounting for 5.25" and 3.5" storage devices. Additional security features include power rail monitoring with alarm and warning system, CPU diagnostics (P.O.S.T.), dual redundant power supply and internal temperature monitoring. The chassis has two 60mm 12V DC fans drawing air through the front panel filters, which are easily accessed for cleaning or replacing.

Why Blue Chip Technology?

The broadcast world revolves around fixed schedules and no second chances. Consequently, the service and support element of their supply chain is key to Pro-Bel meeting their own customer's demanding expectations.

Blue Chip Technology design and manufacture in the UK, this degree of control underpins an extremely flexible and responsive approach. "We are a highly integrated team, this means we can keep promises and really look after our customers." explained Barry Husbands, Blue Chip Managing Director.

"Icon represented a competitive buy for a high end industrial system," commented Russ Trayling, Pro-Bel Operations Manager. "We know that a Blue Chip computer will perform from day 1 and need minimal support in the field – and this lets us concentrate on what we do best."

Conclusion

Pro-Bel now has hundreds of Blue Chip Icons in the field, their broadcasting products serve viewers from New York to Nepal, from the BBC to Disney.

By standardising their computer hardware around the Icon, Pro-Bel have an integrated component to their overall solution. This avoids the associated cost and resources incurred in potentially supporting many flavours of desktop computers, that have not been designed to run mission critical applications, 24/7.