

A Computer for Every Application

Harsh-Environment Protection Contributes to Reliability

THE MOST important feature to look for in an industrial computer depends on the application, says Ed Boutilier, president and CEO of Stealth.com (www.stealth.com). “An application may require protection from a harsh or dirty environment, or it may require advanced temperature, shock and vibration specifications,” he says. It could also be a situation where size and packaging of the industrial PC are important, depending on where it’s to be deployed. “Overall, the best feature is reliability—knowing that your industrial PC can be counted on for long-term operation,” says Boutilier.

Charles Chen, embedded business development manager at Moxa Americas (www.moxa.com), agrees that reliability is the key. “In a 24/7, mission-critical environment with no downtime, a rugged and solidly designed industrial computer becomes the most significant feature to have over program-mability, performance or functionality,” he says.

“Only picking one feature is tough, but I would say the availability of rugged mass storage devices such as solid-state hard drives is the most important feature to look for in an industrial computer,” says Bjoern Falke, product marketing senior specialist, automation, Phoenix Contact (www.phoenixcon.com). “These are designed to withstand challenges such as shock or vibration in an industrial environment. In the past, these solid-state drives were not

available in the large sizes being offered today. In addition, the price of these drives has come down to a point where they’re suitable and affordable to use in industrial PCs.”

Corey McAtee, product manager at Beckhoff Automation (www.beckhoffautomation.com), believes scalability is key to finding the sweet spot. “When engineers are concerned with finding that controller sweet spot and balancing performance with budget, it’s invaluable to have a deep portfolio of controllers to choose from,” he says. “Of course, that bull’s-eye isn’t going to stay put forever, so it’s equally important to have the ability to move one way or the other over time as applications evolve and new markets are entered.”

WATERPROOF

WPC-500F waterproof, small-footprint, fanless computer meets IP67/NEMA 6 environmental specifications. The aluminum chassis acts as a heat sink to dissipate internal heat and provide noise-free operation. It uses Intel’s Atom processor, has power, video, serial and USB connections coupled through watertight, locking



bayonet-style connectors, and operates 10-30 Vdc. Systems are compatible with Microsoft Vista/XP and Linux.

Stealth.com; 888/stealth; www.stealth.com

RELIABLE RELIO

The Relio R9 is based on the Atmel 200MIPS ARM9 RISC processor and features LCD and backlight controller, resistive



touchscreen controller, one USB device and two USB host ports, CAN bus 2.0B interface and Windows CD 6.0 BSP Binary. Operating temperature ranges from -40 °C to +85 °C. Available with up to 256 MB RAM and 256 MB Flash memory, the standard I/O features Ethernet, serial, USB, CAN Bus, digital and analog interface.

Sealevel Systems; 864/843-4343; www.sealevel.com

INDUSTRIAL CONTROL

The NI 3110 industrial controller with an Intel SL9JT L2400 1.66 GHz Core duoprocessor and the NI 3100 industrial controller with an Intel 1.06 GHz Celeron M 423 processor are configured with the Windows XP operating system and designed for rugged applications that require fanless cooling and