

CASE STUDY

Partnering for the Long Run:

IVC Displays for Original Equipment Manufacturers and Machine Builders

Segment	Original Equipment Manufacturers (OEMs) and Machine Builders
Industries Served	Industrial automation, specialty control systems, laboratory and scientific equipment, and other precision- or compliance-driven markets
Engagement Model	Embedded hardware supplier, technical consultant, and long-term technology life-cycle partner
Core Capabilities	Industrial touch screen computers, embedded mainboards, deterministic and real-time operating platforms, application continuity support

BACKGROUND

Original Equipment Manufacturers and machine builders design and build the specialized equipment their own customers depend on to run precisely, safely, and continuously — often for years or decades at a stretch. Behind almost every one of those machines sits an embedded computing platform: the touch screen interface an operator uses, or the mainboard that drives the machine's control logic.

Rather than design and qualify that computing hardware themselves, most OEMs and machine builders partner with a hardware supplier who can take on that piece of the design — supplying, integrating, and supporting the embedded platform so the OEM can concentrate on its own core expertise: the machine itself, its control software, and its relationship with the end customer. IVC Displays has served in that role for OEMs and machine builders for more than 20 years, supplying industrial touch screen computers and mainboards across a range of industries.

THE CHALLENGES OEMS FACE

Across the OEMs and machine builders IVC works with, a common set of challenges shows up again and again:

Component life-cycle and obsolescence — the chipsets and CPUs behind any embedded computing platform eventually reach end-of-life. Left unmanaged, this forces an OEM into an unplanned redesign at exactly the wrong time.

Protecting the investment in control software — OEMs sink significant engineering effort into their control applications. A hardware or operating system change that breaks that software means costly rewrites and re-validation, sometimes across an entire installed base of machines.

Deterministic, real-time performance — many machine control and process applications depend on precise, predictable timing that general-purpose, consumer-grade computing hardware and operating systems were never built to guarantee.

Reliability and compliance under continuous operation — OEMs serving regulated or mission-critical industries need hardware that can run accurately, unattended, for extended periods, and that supports the data logging and audit requirements their own customers are held to.

A partner, not just a parts vendor — OEMs benefit most from a hardware supplier who understands their application well enough to advise on integration decisions, not one who simply ships a component and moves on.

THE IVC DISPLAYS APPROACH

IVC Displays works with OEMs and machine builders as a long-term technology partner, built around a few consistent practices:

Purpose-fit hardware — industrial touch screen computers and mainboards selected or configured for the OEM's specific machine, environment, and control requirements, rather than off-the-shelf consumer parts.

Deterministic operating platform expertise — matching each application to an operating environment capable of the timing precision the machine requires, from legacy real-time platforms to modern embedded operating systems such as Windows IoT.

Proactive life-cycle management — tracking chipset and CPU end-of-life timelines and qualifying replacement hardware in advance, so OEMs are never caught off guard by a component going out of production.

Application continuity — working to preserve compatibility with an OEM's existing control software across hardware refreshes and operating system transitions wherever possible, so a proven application keeps running rather than being rewritten from scratch.

Ongoing engineering consultation — staying engaged as an OEM's products and requirements evolve, rather than treating the relationship as a one-time hardware sale.

THE PATTERN IN PRACTICE

This approach plays out across IVC's OEM relationships in similar ways. In one long-standing partnership, an OEM building precision, timing-critical control systems first adopted an IVC-supplied deterministic touch screen platform in the mid-2000s. As successive generations of chipsets reached end-of-life over the following two decades, IVC supplied newer touch screen hardware while preserving compatibility with the OEM's original control application — keeping that same software in service across eight hardware generations before the OEM eventually redeveloped it for a modern embedded operating system, at which point IVC's role shifted to supplying the underlying mainboards the OEM now integrates directly into its own systems.

In another, an OEM manufacturing precision environmental control equipment for regulated scientific and pharmaceutical customers has relied on IVC's industrial touch screen computers, and the application support behind them, for well over a decade to help meet the accuracy, reliability, and data-integrity demands its own industry requires.

VALUE DELIVERED

For OEMs and machine builders, this partnership model consistently delivers:

Lower total cost of ownership — avoiding the repeated software redevelopment costs that an unmanaged hardware transition would otherwise force.

Extended product life spans — a single control application carried forward across multiple hardware generations rather than retired with the hardware.

Faster time to market — integrating a proven, purpose-built computing platform rather than developing embedded hardware expertise in-house.

A durable technical relationship — a consulting partner who manages the hardware life cycle proactively, rather than a transactional vendor who has to be chased down at each obsolescence event.

LOOKING AHEAD

As industrial computing hardware and operating platforms continue to evolve, IVC Displays continues to serve OEMs and machine builders the same way it has for two decades: supplying dependable, purpose-built touch screen computers and mainboards, and standing alongside its OEM partners as trusted technical consultants for the life of their products.