

Mechanical design, electronics, software, and integration.









Who our we?

Ross Technologies Group has provided embedded computing solutions for over 20 years. We offer both complete solutions as well as components. We have experience in areas such as metal fabrication, PCB board design, embedded hardware and application software.

What do we do?

Hardware Solutions:

We manufactures a wide array of custom computer solutions to suit each individual application.

- Industrial workstations and servers
- all-in-one computers and operator interfaces
- Embedded small form factor and micro sized computer platforms
- Monitor backpacks and custom kiosks from table top to 7ft tall.

Software Solutions:

We have developed numerous industrial applications over the past 20 years. We have a wide range of programming experience including:

- Machine monitoring, control, production reporting and paperless manufacturing
- Time & Attendance, job tracking, access control, process control and compliance
- Mobility applications and wireless inventory
- Database and host connectivity.

PCB Electronics:

We design and manufacturer custom electronics for control, monitoring and sensing.

- Custom sensors and cost effective embedded micro controller hardware.
- Real time control and machine interface
- Supervisor monitoring and control.

Mechanical Fabrication:

We have a wide variety of custom and standard computer cases and assemblies/

- Workstations and servers
- AIO operator interfaces and Kiosks
- Small form factor and internal subassemblies
- Touch panels, and back pack (behind the monitor solutions).
- Bezels, keypads, silkscreen keypads, and graphic wraps.



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Wall mounted Touch Computer



Shelf mounted compact interface



7 foot Tall Floor mounted Kiosk

Kiosk / Operator Interface

Operator interfaces are an important part of many applications. We strive to offer interface solutions that are attractive, effective, natural and simple.

- Wide Range of custom and standard Operator interfaces
- 7ft tall to tablet size
- Graphical overlays and silk screens
- Wall mount, free standing, adjustable arms, mobile
- Software development and integration support
- Cost effective and functional



Wall mounted Touch Computer



Embedded PC Soda Vending Machine



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Arm Mounted AIO touch with keyboard tray

Small Form Factor Monitor Back Pack

Often in embedded computing applications, space is a premium and the computing platform needs to be compact or retract out of the way. We offer palm sized and smaller computing solutions as well as adjustable articulating arms.

- Compact, Palm Size computing and smaller
- Retractable Articulating Arms
- Low power consumption, fan-less designs
- Embedded OS linux, Android, Windows Pro or Embedded
- Can be tucked behind the monitor or digital sign
- Wide range of processors from i7 to fan less atom CPU
- Cost effective and functional



Compact Embedded Computer



Model 132 Back Pack PC







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Long Life Revision Controlled Servers & Workstations



555 Tower

Long life-cycle, product stability and revision control is essential for OEM platforms. Software is approval and testing, safety and agency certifications, and product support can be provide, with out long life platforms. Typically 3-5+ years are provided.

- Long life cycle with last time by notification
- Functional and cost effective
- Revision Controlled parts
- Control of the mechanical chassis and bezels
- Safety and FCC certification
- Tower, Desktop, Rack mount options
- Cost effective and functional designs.



526 compact workstation



416 Rack mount computer



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Embedded microcontrollers and Real-Time Coprocessors

While Computers and operator interfaces are exceptional at displaying and processing data, embedded micro controls and intelligent real time sensors and I/O are an essential component in many embedded solutions.

- Real-time Micro Controllers PCB coprocessors
- Cost effective I/O controls
- Economical sensor and machine interface
- Smart sensors and data collection and control
- Supervisor monitoring and control of critical functions



PCWD6 Watchdog Card with fan control & Alarming



COP1 board real time serial / USB data framing coprocessor



Optically Isolated Inputs



MCWD2 Machine Control with serial / USB interface



Digital / Relay outputs



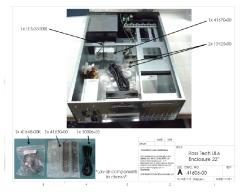
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Time & Attendance and job tracking



Process control and machine monitoring



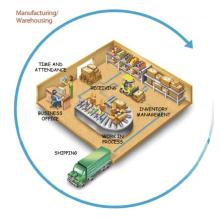
Software applications for industrial automation

Innovative software for embedded solutions.

- Automation software for machine control and monitoring
- IOT (internet of things) connectivity to real time sensors and devices
- Software to track people for time and attendance, job tracking
- Operator interface software to simplify forms and data input
- Embedded software for smart sensors and coprocessors
- Mobility software to control inventory or for on the go apps
- Quality control software for data collection and acquisition
- Interface software to connect machine data to Host & Mainframes
- Database solutions to store and retrieve critical information
- Reports for managers and executives to track production



Mobile Wireless Warehouse Inventory Control



Factory Automation