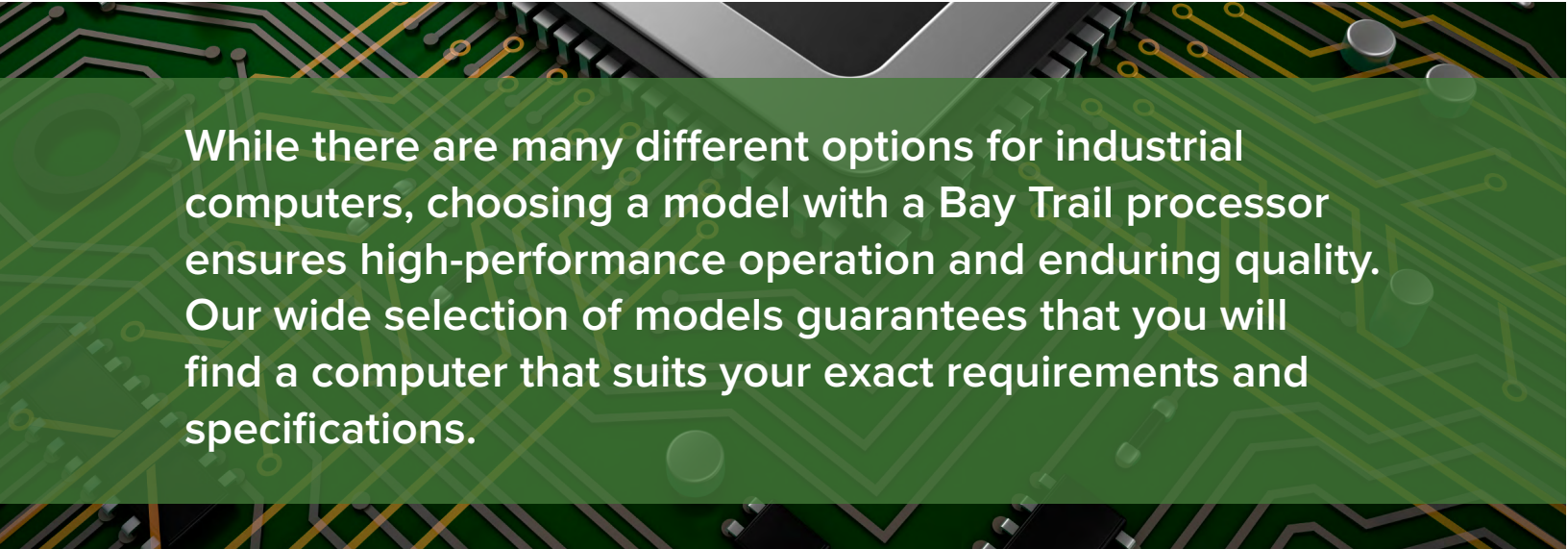# QUALITY BAY TRAIL PRODUCTS:

A BUYING GUIDE

While there are many different options for industrial computers, choosing a model with a Bay Trail processor ensures high-performance operation and enduring quality. Our wide selection of models guarantees that you will find a computer that suits your exact requirements and specifications.

Innovation for Over 30 Years

ICP America has been at the forefront of the industrial computer industry since the early 1980s. Always staying one step ahead of the technological curve, our engineers and designers provide the most innovative and user-friendly options available. As the information age continues to progress, so do our innovative projects and initiatives, including:

- **SBC Boards** — Since first using our line of SBC boards in the late 1980s, the industrial control and automation industries have continued to trust our products, most notably our long-lasting IND-386 SBC.

- **Ruggedized Computers** — When critical errors started occurring in our ruggedized models in the early 1990s, our engineers quickly developed a solution. By introducing designs with disk-free operation, we successfully avoided latency problems in mechanical drives.

- **Competitive Pricing** — As off-shore IPC companies began their influx into American markets in the mid-to-late 1990s, the market quickly became saturated with competition and price wars. We responded with a massive expansion, developing an increasingly robust electronics catalog with some of the most competitive prices in the industry — without compromising the high quality standards of our products.

With a long history of dependability and innovation, we are proud to offer high quality Bay Trail products to customers around the globe.

Quality, Stability, and Speed

High performance, low power consumption, and ease of use in industrial environments all come standard with Intel's 22nm Atom Z3000 series, or "Bay Trail" processors. These products deliver significant improvements over previous processor models, offering the highest levels of speed, performance, and fluidity of use through multiple applications. the ship.

With a DPS, vessels are controlled using onboard computers that take in sensor data to maintain an exact position without user input. They also have built-in redundancy in case the DPS was to fail.

3x Faster Than Previous Models

Older versions of embedded boards simply cannot compare to the speed of Bay Trail processors. For example, the Bay Trail quad-core SoC is three times faster than the previous generation, additionally offering twice the CPU and three times the GPU. Additional available upgrades further enhance the processor's speed, including new specifications that include DDR3L and USB 3.0, to allow for some of the fastest data transmission available in embedded boards.

High Performance

Bay Trail processors offer excellent performance at many different levels. Supported by a quad core, which includes Intel Burst Technology 2.0 for the fastest and most fluid performance available, the model offers strong visual capabilities and vibrant displays. The unit offers expanded storage capabilities with SD and mSATA card support, while advanced technology simultaneously allows for prime operation with low power consumption. With excellent efficiency, quality components, and strong performance capabilities, Bay Trail processors boast extended product performance and lifespan.

Supporting Multiple Platforms

This processor series allows users to quickly switch between applications without delays or downtime due to overload. Supporting a full array of operating systems including Windows 7, Windows 8.1, Windows 10, and Android, the processors allow for maximum flexibility for virtually any application that customers typically employ.

Strength and Longevity

Bay Trail products are guaranteed to last for more than five years, making them the perfect choice for projects that require maximum stability and reliable longevity. Their reliable and rugged construction can also withstand an extended range of temperatures, from -10°C to +50°C, making them a perfect choice for applications in the most demanding environments.

A Full Selection of Bay Trail Products from ICP America

We offer a full array of products that feature Bay Trail processors, perfect for customers looking for specific sizes and applications for a range of unique projects. These products include:

Industrial Panel PCs
Equipped with IP aluminum front panels, all of our industrial panel PCs are designed to endure extremely harsh, hazardous, and extreme environments. Bay Trail processors are featured in the following products:

- **PPC-F10B-BT** — Features include a 10.4" screen, fanless operation, low power consumption memory supported DDR3L, IP 65 compliant front panel, and dual GbE for backup.

- **PPC-F06B-BT** — Features include a 5.7" screen, fanless operation, 9 V~30 V wide DC input, SSD mSATA, and dual GbE for backup.

- **PPC-F08B-BT** — Features include an 8" screen fanless operation, IP 65 Compliant front panel, SSD mSATA, and dual GbE for backup.

- **PPC-F12B-BT** — Features a robust IP65 aluminum front bezel, highly aesthetic ultra-thin bezel for panel mount installation, and dual full-size PCIE mini-card expansion.

- **PPC-F15B-BT** — Features a 15" screen, TDP 10W, IP65 aluminum front bezel, and 9V~36V DC wide range DC input, and supports IEI iRIS-2400 remote intelligent solutions.

- **PPC-F17B-BT** — Features a 17" screen, one 2 GB RAM, projected capacitive or resistive touchscreen, dual full-size PCIE mini-card expansion, and supports IEI iRIS-2400 remote intelligent solutions.

EPIC Single Board Computers

Developed as compact, industrial-grade computers, Embedded Platform for Industrial Computing (EPIC) single board computers are perfect for applications that require industrial-quality computers intended to fit in sizes ranging from PC/104-Plus to EBX standards. The following option supports Bay Trail processors:

- **NANO-BT-i1** — This EPIC computer supports dual independent displays with LVDS, VGA, and HDMI. It also supports IPMI 2.0 with iRIS-1010 module, and features IEI one key recovery solutions, allowing customers to create rapid OS backup and recovery.

Biscuit 3.5

As one of the most compact and efficient single board computers on the market, the Biscuit 3.5 computer is equipped with a full range of features. Its small size enables it to fit into systems with the most specialized requirements. The following model features a Bay Trail processor:

- **WAFER-BT-i1** — Features a 3.5" screen and supports Intel 22nm Atom / Celeron on-board SoC, dual independent display support, 1333/1066 MHz 1.35V DDR3L SDRAM supported up to 8GB, and IEI one key recovery solutions, allowing customers to create rapid OS backup and recovery.

Mini ITX Motherboards

For applications that require the most compact motherboards, the following Bay Trail options are available:

- **eKINO-BT** — This model supports an AUPS sub-system and one or two 204-pin 1333/1066 MHz unbuffered DDR3L SDRAM SO-DIMMs. In addition to providing two GbE interfaces and IEI jumper-less functions, it also supports four USB 2.0, two USB 3.0, two SATA, and four COMs.

- **KINO-DBT** — Features one VGA and one DVI port for dual independent displays. It also supports two 204-pinn 1333/1066 MHz dual-channel unbuffered DDR3 low voltage SDRAM SO-DIMM with memory up to 8GB. This model also features an iDP connector that supports HDMI, DVI, VGA, LVDS, and DP monitors.

About ICP America, Inc.

In an industry that is constantly reinventing itself, ICP America has remained one step ahead of the competition for more than 25 years. Originally founded as a product development company, ICP America quickly made a name for itself with computer innovated designs.

Today, we continue to develop computer products to meet a need not yet addressed by existing solutions. Our engineers are given the challenge to develop computer products that will continue to outperform our competitors, push technology to its limits, and have a sustainable product lifecycle. Trust your project to ICP America — "Suppliers of Innovative Solutions for the Industrial PC Market."

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