abaco SYSTEMS

WE INNOVATE. WE DELIVER.
YOU SUCCEED.

About Abaco

With more than 30 years' experience and an extensive history of leveraging the benefits of Intel® technology, Abaco Systems is a leader in open architecture computing for aerospace, defense and industrial applications. With an active presence in hundreds of national asset platforms on land, sea and in the air, Abaco is trusted where it matters most.

Whatever you want

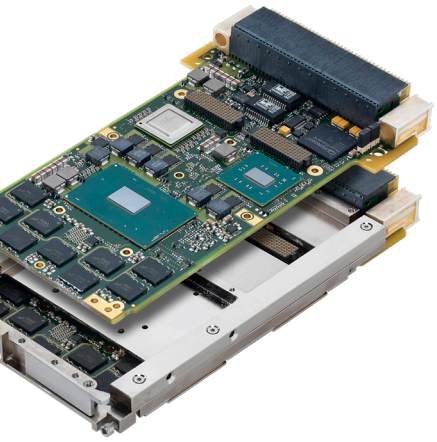
Abaco's embedded computing solutions build on industry standards – and when it comes to processors, Intel® is the industry standard. With a range of performance/watt and price/performance options, Intel® processors deliver to our customers' precise requirements. Intel's progressive integration of additional functionality enables us to achieve superior board-level density – addressing our customers' needs for minimal size and weight.

Our long term relationship with Intel® allows us to carefully select, from its extensive range of processors, those that it has indicated will benefit from extended availability – supporting Abaco's commitment to long term support. Whatever the form factor, Abaco offers a wide-ranging choice of single board computers, multiprocessors, graphics/video and mission computers and mission ready systems – all leveraging the benefits of Intel® technology.

Mission ready – but customizable

For many of our customers, minimizing time-to-deployment is a key goal. For them, Abaco has developed a range of mission ready systems that are, in effect, plug 'n' play. Our GVC2000 rugged HPEC display computer, for example, leverages the capability of the powerful 12-core Intel® Xeon® D processor in a form factor that minimizes size and weight.

Just because it's a complete, self-contained solution doesn't mean that our customers have to compromise on I/O, however. Abaco's revolutionary MMS technology can accommodate almost any requirement – but with neither the cost nor lead-time normally associated with custom development.



Cost-effective upgrades

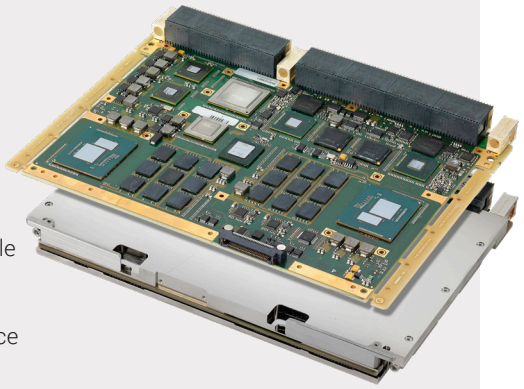
Many programs see a deployed life measured in decades. For these customers, regular and frequent technology refresh is imperative in order to increase performance in line with increasing application demands. It's that customer need that drives the development of our Intel®-based single board computer range. Take the 3U OpenVPX SBC329, for example. A powerful, flexible SBC in its own right, featuring the quad core 3.0GHz Intel® Xeon® E3 processor, it was designed to be form-, fit- and function compatible with its predecessors, the SBC326 (introduced four years previously) and SBC328 (announced only 18 months previously).

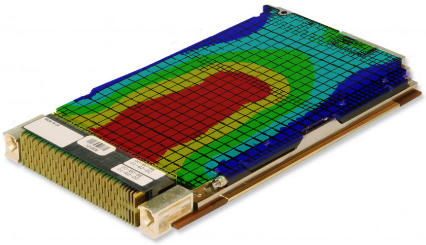
The result? A performance uplift – but with minimal disruption or cost.

Multiprocessor powerhouses

What happens when you combine two 2.4GHz quad core Intel® Core™ i7 processors? Over 600 GigaFLOPS of processing power is what happens – in a single chassis slot. Abaco's remarkable 6U OpenVPX DSP282A multiprocessor is designed for the most demanding, computation-intensive applications – such as sensor data acquisition - where performance compromise is not an option.

Alternatively, our 6U OpenVPX IPN252 multiprocessor takes a 2.1GHz Intel® Core™ i7 processor, and partners it with a 640-core GPU to deliver not only a 'best of both worlds' solution – but also an incredible 1.4 TeraFLOPS of performance per slot for the most challenging applications in the Intelligence, surveillance and reconnaissance (ISR) domain.





Cooling breakthrough

At the heart of the Abaco GVC2000 mission ready system is the 3U VPX SBC347D – and it represents an extraordinary achievement in the world of Intel® processors. To maximize reliability, Intel® designed the 12-core Intel® Xeon® D processor featured in the SBC347D to throttle back as its temperature rises – a vital feature in mission critical environments.

Thanks to our leadership expertise in cooling, Abaco has rewritten the rules. Uniquely, the SBC347D will operate at maximum throughput even at temperatures as high as 75°C. For our customers, who cannot compromise on either performance or reliability, the SBC347D represents the optimum solution.

Secure and reliable - by design

Today's sophisticated security threats require responses that are no less sophisticated and that encompass every aspect of how a system operates. That's why we incorporate a range of security features in our hardware that are designed to assist with user-defined Anti-Tamper and Information Assurance strategies - including an inherently secure FPGA solution and support for Intel's Trusted Execution Technology.

For those of our customers requiring flight certifiability, we also provide board- and subsystem-level solutions on a number of our Intel®-based platforms. We provide the artifacts necessary to readily enable certifiability all the way to Design Assurance Level (DAL) A. This substantially reduces our customers' cost, risk and time-to-market.

Developing better applications - faster

Our powerful, flexible Intel®-based hardware platforms are complemented by our AXIS – Advanced Multiprocessor Integrated Software – development environment. A comprehensive suite of software tools and libraries, it is designed to enable the rapid creation of sophisticated solutions that leverage the potential of multi-core, multi-processor and heterogeneous high performance computing architectures.

Not only does AXIS ease and speed application development – from design through debugging, optimization and tuning to deployment – but it also supports application scalability and portability across platforms, enabling a straightforward transition from lab to field. Inherently intuitive and quick to learn, AXIS gives developers the tools they need to be more productive.

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