

Embedded software development

As end-user demands drive the need for more intelligent and interconnected products, embedded software is increasingly called upon to enable innovation and flexibility.

The growing importance of embedded software as a differentiator, combined with increasing product complexity and frequent release cycles, creates many challenges.

Our core competency

Embedded software development is our core competency. Our capability includes the entire range of embedded solutions from single-processor to multi-processor control applications and embedded software systems.

With more than 30 years of experience developing embedded software solutions, we understand the technical and business issues at the core of your system and can develop embedded software to run reliably and with high performance on your chosen hardware.

Our solutions

Our embedded software development solutions include:

- Design, development and maintenance of instrument control software
- Embedded applications such as GUIs, middleware and protocol stacks
- Developing device drivers and board support packages
- Software and application porting across different operating systems and platforms
- Software optimisation, feature enhancement, performance tuning, maintenance and support for existing products

OVERVIEW

- High quality and reliable embedded software solutions
- More than 30 years experience
- Effective blend of embedded talent, tools and industry specific experience

CORE EMBEDDED COMPETENCIES

Operating systems

Pebble Bay has experience with all leading operating systems and platforms including: VxWorks, Linux, LynxOS, INTEGRITY, Nucleus, QNX, ThreadX, Windows CE, Bare Metal

I/O technologies

USB, Serial drivers, Networking, VME/VPX, PCI/PCIe/CPCI, sRIO, I2C, SPI, SCSI

Processor competencies

ARM, MIPS, Intel x86, PowerPC, Coldfire

Market expertise

Industrial automation, Military & aerospace and Telecommunications sectors.

“We have worked with Pebble Bay and in all cases we have found the standard of work extremely high, without failure and delivered on time, complete with full support documentation.”

SIEMENS

About us

Pebble Bay is an embedded software development company providing specialised solutions that enable customers in a range of industry sectors to build reliable, high-performance and easily maintained embedded systems.

With vast project experience and specialist market expertise, we have a proven ability to significantly reduce development time and minimise project risk and cost.

Why Pebble Bay?

There are several benefits that set us apart, including:

Highly effective project and quality management

We actively manage all embedded projects, minimising your effort. Our approach is disciplined and pragmatic, keeping you fully informed throughout. This has given us an enviable track record of efficient, on-time and within-budget delivery. We adopt a similar approach to quality management, allowing us to deliver reliable and easily-integrated solutions.

Scalable solutions

We provide embedded software development and consultancy services covering all product lifecycle phases, from initial feasibility study through to system development and product improvement.

Strong technical focus

We have unparalleled experience of hardware and software integration and the development of low-level software that forms the basis of high-performance embedded systems.

Flexible partner resources

Our network of partners enables you to benefit from specialist resources for software, hardware and FPGA design. We provide a single point of supply to deliver your project in conjunction with our partners.

CASE STUDIES

- Creating a high performance Linux DMA Driver.
- Developing a prototype system to demonstrate capability to stream video over ethernet for a military customer.
- Developing safety-critical control software for a remote-controlled vehicle for a military customer.
- Creating a software documentation framework.
- Providing software estimation training and workshops.

Visit the case studies section on www.pebblebay.com to read about these and other success stories.

WHY PEBBLE BAY?

- Extensive embedded experience
- Strong project management
- Speed and increased time to market
- Lower project lifecycle costs
- Reduced project risk
- Strong partnership network

“Totally professional and extremely high quality results. A pleasure to work with, delivering what they promise, when they promise.”

HITEX UK