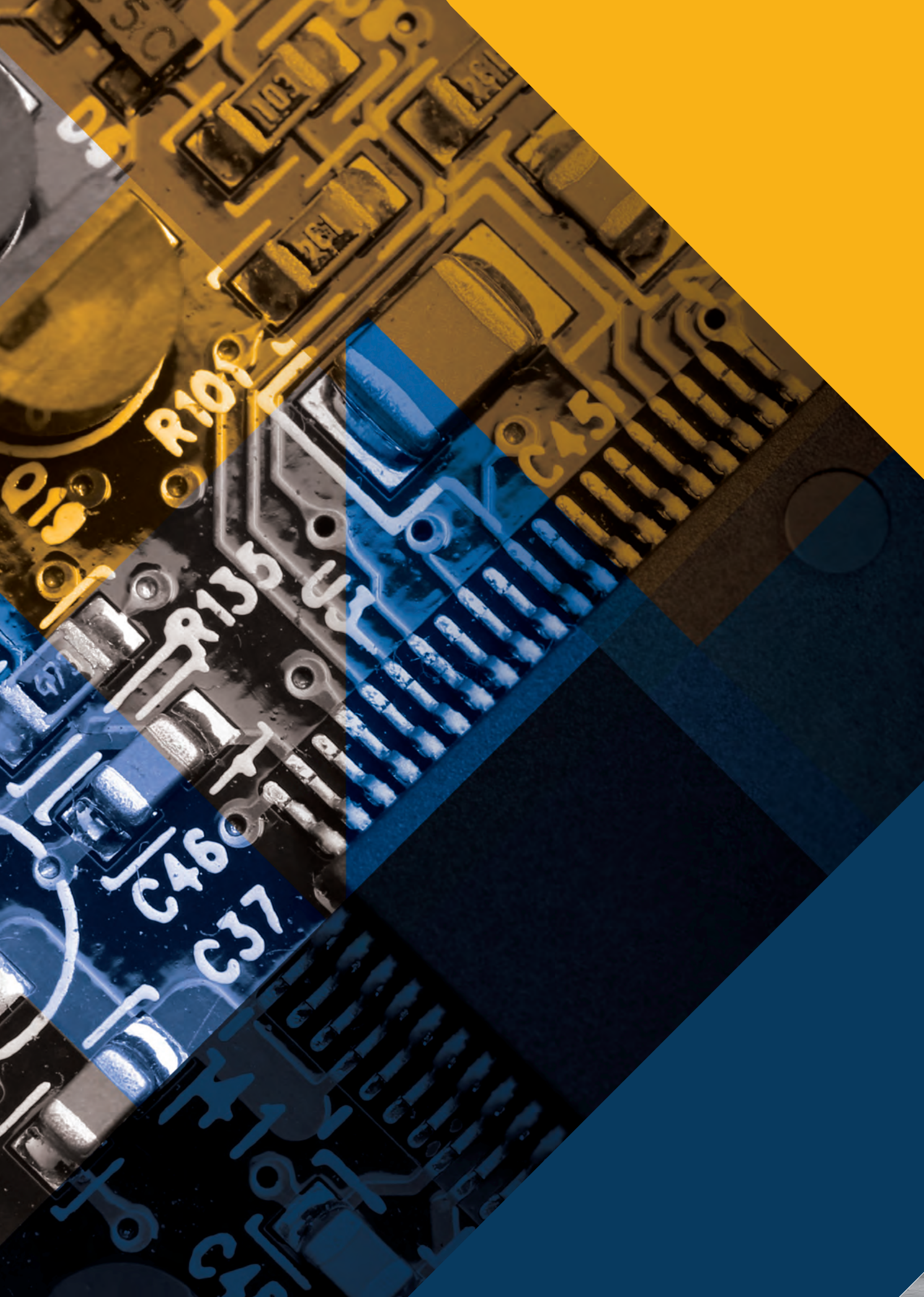




**THE
MANUFACTURER
BEHIND THE
SOLUTIONS YOU
KNOW**







About BVM

Since BVM's inception in 1989, the company has grown steadily and is long recognised for its expertise in the supply of Industrial PC (IPC) components, sub-assemblies and its own-brand products to support a broad customer base in a range of industries.

BVM's core ability is in developing IPC solutions, using their skills to integrate power supply's, memory, storage, TFT displays, cellular modems for remote connectivity, GPS and multiple channel capture cards and operating systems.

BVM has a range of embedded O/S configuration services. Customers can decide upon the level of customisation they want, ranging from a generic Microsoft Windows (7, 8.1 and 10) image to a fully customised installation where all their user accounts, software and application configurations are all fully pre-installed (including Windows Updates). BVM image service is fully supported, inclusive of maintenance services whenever required for product lifetime.



Meet the team

Our supporting team have all worked in an embedded environment for a number of years, consequently providing knowledge, experience and good advice around all BVM's products & services when and where you need it. We don't profess to know it all at the time – but we'll always help in the first instance and get back to you when a little more information is required.



Rod Clarke
Managing Director

Rod has worked with computers since graduating from University. Initially specialising in large mainframe systems before moving to embedded systems in 1982. He led the formation of BVM in 1989 and has been the MD since.



David Smith
Technical Director

David's expertise is in electrical and electronics engineering, a chartered engineer and member of the IET. David combines his broad knowledge of embedded hardware in association with his practical working knowledge of application software and legacy & modern day operating systems.



Chris Brierley
Sales Director

Chris joined BVM in 2014 and brings with him 20 years experience of the embedded market. His experience covers both embedded boards, systems and LCD/touch screens.



Diane Beatson
Operations Manager

Diane has a strong background in manufacture of technical based products – and is responsible for all aspects concerning BVM production processes; scheduling, material procurement and personnel assignment.



Matthew Watkins-Glass
Field Sales Engineer

Matthew has been involved in selling computing solutions for over 10 years – joining BVM in 2012. Matthew is responsible for support & development of current and new business and has a broad knowledge of PC systems relating to a wide variety of industry applications.



Dave Ripley
Business Development Manager

Dave is an accomplished BDM with many years experience within the world of embedded computing, from both a sales and product management perspective. Dave's role involves him applying his expertise in helping customers develop their solutions using the right BVM products & services to bring their products to market.



Colin Coote
Product Manager, Thermal Printers

With his wealth of experience both technically and commercially, Colin is responsible for supporting thermal print mechanisms and portable handheld & POS printers.



Rob Webb
Pre & Post Sales Technical Support

Rob has worked with embedded computers for over 15 years assisting customer applications with all aspects of hardware; CPU, memory, storage, TFT & touch-screen integration, Microsoft Embedded Windows deployment and BIOS's.



Julia Maynard
Financial Controller

Julia has been working for BVM for over 20 years, overseeing all things financial including credit control and currency arrangement.

Areas we work in

As the manufacturers behind many well known brands, BVM's products are in everyday use around the world in a range of industries:

- » Airports
- » Railway
- » Manufacturing Plants
- » Marine
- » Audio Visual
- » Surveillance & Security
- » Nuclear
- » Building & Environment Automation

The Products & Services we Supply

Whether your application is to address a requirement within general automation, medical, gaming, transportation or energy, these are just some of the products we supply.

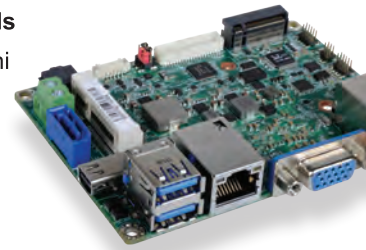
We can supply them to you in their standard format ('bare bones') – or fit memory, storage, expansion cards, peripheral components to provide local and cellular connectivity and deploy a generic or custom embedded operating system.

We can even integrate them as component parts within custom designed enclosures to form a finished, all round solution.

3.5", 5.25", Epic
Low power, rich i/o,
high performance

Industrial Motherboards

Pico ITX, Nano ITX, Mini ITX, Micro ATX, ATX – multiple solutions, flexible with long lifetime availabilities



System PC's

Pre configured or barebone – standard or wide temperature operation, DIM rail mounted – expandable solutions making for cost effective solutions



Embedded Computing

**COM Express,
XTX/ETX and
Qseven**
X86 or ARM
based



Panel PC Computing

Industrial

Atom Bay Trail, Celeron Quad Core, i-core series, fanless, resistive & projective capacitive touch

Medical

Atom Bay Trail, i-core series (Haswell, Broadwell, Skylake), UL-60601, anti bacteria, 4kV isolation, resistive & pCAP touch

Marine

Auto dimming, anti glare/anti reflective, ECDIS, optical bonding, DNV approved, IEC 60945, IACS –E10, wide temperature operation

Stainless Steel

Atom Baytrail, i-core series (Haswell, Broadwell, Skylake), IP66, IP67, IP69K, M12 Connectors, resistive & pCAP touch

Rugged

Wide temperature operation (-20° C to +60° C), wide voltage input (9-36V), anti shock, anti vibration, GPS, WLAN, E-Mark

Open Frame

Front (Panel mount) and rear mount (open frame), Bay Trail Atom Celeron, i-core series



Rugged System PC's
-40°C to +70°C operation,
EN 50155 (Rail), UL, E13
(vehicle) and Marine: Rugged
design, anti shock, anti
vibration and modular
solutions



Rack Mount PC's
1U to 4 U, standard or
custom build



Design for Manufacturing Services

1 Concept

We understand that you're the experts in your particular industry and know what's required to ensure your product stays ahead of its competition. Since 1989, BVM have been specialists in providing embedded computing solutions within variety of industries – and pride ourselves on the diverse spread of applications we've successfully designed for.

We can take your ideas - be it an outline specification, a functional requirement or even a rough prototype to derive a memorandum of understanding (MOU) to ensure you're confident that we know what you need before the real work begins. This not only ensures that all parties are in mutual agreement with the task at hand, but ensures potential issues are explored up front so that there are no surprises later in the process. It's also the time to explore the "nice to haves" that our experiences can help in providing for the minimal of cost.



2 Design

BVM have made the investment in CAD to provide the latest tools for its electronic & mechanical hardware design team. This is essential when it comes to ensuring accurate integration of TFT displays, embedded motherboards, wireless and cellular connectivity, enclosure design, additional electronics and a products overall look and feel.

Any potential issues concerned with power supply, thermal management, vibration, and EMC are all accounted for at the early stages of a products design. These are just some of the core competencies that we carry:-

- All designs are implemented against ISO90001 quality management systems
- Designs using DDR, ISA, PCI, PMC, SATA, LVDS, USB and PCIe
- Inclusion of expansion, riser and carrier cards in 'boxed' products.
- PCB layouts utilising 1,500 ball grid array devices down to 0.5mm pitch
- PCB high density designs utilising components down to 0201 in size (0.6x 0.3mm)



3 Development

Whether a new printed circuit assembly or an embedded system, prototypes can be produced for design verification and functional testing with your application software. Environmental & extended temperature testing, EMC testing and general cosmetic and functional tests are all part of the services we provide around product design so discrepancies can be identified & rectified before your product is released for manufacture & marketing.

4 Manufacture

We only select components from reliable sources with long life time availability to ensure your product stays in production for its required life cycle – and remains on budget. Our procurement and stock management team provide the advice and experience that you'll need. Here's a selection of the manufacturing management services we supply :-

- Free issue parts management
- Traceability & serialisation
- Customised packaging
- Corrective action reporting
- Goods-in inspection
- Product labelling
- EOL/LTB management
- Online RMA system

Embedded & Real-time Operating System Configuration and Deployment

Why Windows Embedded ?

Windows embedded operating systems are technically identical to their OEM counterparts – such as you'd find in Windows 7, 8.1 or latterly, Windows 10.

Embedded versions offer some major advantages. They're available for a minimum of 10 years from their launch – and an embedded operating system is like a passport freely allowing for global shipping of your product (restrictions around OEM licensing makes this harder to do).

However, the main advantage of an embedded operating system is that it allows for the customisation of the operating system, specifically for your application needs – and provides for a much more efficient and effective system. It also provides for a “locked down” environment ensuring repeatability at power on.

Our Experience

BVM have been implementing operating systems on embedded hardware in excess of 25 years. From the early RTOS days of OS-9 on the Motorola processor range through to Windows NT Embedded, Windows XP Embedded – and present day offerings of Windows Embedded Standard 7, Windows 8.1 and Windows 10 IoT LTSC.

The configuration of Windows Embedded O/S images gives our customers a 'leg up' with their embedded system design projects. We don't write the application software – that's your specialist area, but we can provide a ready to run O/S environment incorporating your application for mass deployment. Alternatively, we can provide guidance on how an implementation should be configured with consideration to using flash storage, write filters and system recovery procedures. Typical applications include generic or customised operating systems on Panel PC's for specialist kiosks through to System PC's and embedded mother boards for a multitude of stand alone or networked (IoT) applications.





Off the shelf and custom embedded PC solutions

Concept, design and development

Manufacturing services

System integration and test

Embedded operating system porting



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