

March 2025 Edition

THE CIRCUIT

Keeping you in the Loop with the latest from EMS

Southern Manufacturing

Flying the EMS flag at the UK's
Leading Exhibition!

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Southern Manufacturing & Electronics 2025

EMS would like to extend a huge thank you to everyone who visited us at Southern Manufacturing & Electronics 2025.

As one of the UK's leading exhibitions for industrial technology, it was a fantastic opportunity to showcase our expertise in contract electronics manufacturing, rapid prototyping, and supply chain management. Engaging with industry professionals, existing clients, and potential new partners allowed us to demonstrate how our services can support a wide range of applications across sectors including

automotive, medical, and industrial electronics. The event also gave us the chance to highlight our surface mount technology (SMT) and through-hole assembly capabilities, which enable us to provide high-quality, reliable electronic manufacturing solutions. We appreciate all the insightful discussions and look forward to continuing the conversations started at the show.



Rob Moore Recognised for Contributions to Grassroots Football

Beyond his role at EMS, Rob Moore is dedicated to supporting Buckland Athletic Football Club, working tirelessly to help develop young players and improve club facilities.

After a long and busy week at Southern Manufacturing & Electronics, Rob was recognised for his efforts with a plaque presented by Mark Buley from the Devon FA, acknowledging the club's success in securing a Community Fund Grant.

This grant, achieved through the collaborative efforts of Rob, John Piller, and others at the club, has provided much-needed funding for a new storage unit for the youth section. This facility will help ensure that equipment is properly stored and maintained, supporting the continued growth of youth football at Buckland Athletic. **A huge thank you to everyone involved in making this happen!**



50TH BIRTHDAY

Celebrating Jamie's 50th Birthday!

A special milestone was reached last week as our Production Manager, Jamie, celebrated his 50th birthday. Jamie has been a key part of EMS for 13 years, playing a pivotal role in ensuring our production operations run smoothly and efficiently. His wealth of experience, leadership skills, and commitment to teamwork make him a highly valued member of our organisation.

As a fantastic team player who always goes above and beyond, Jamie's contributions have been instrumental in EMS's continued success. We wish him a very happy birthday and look forward to many more years working together.

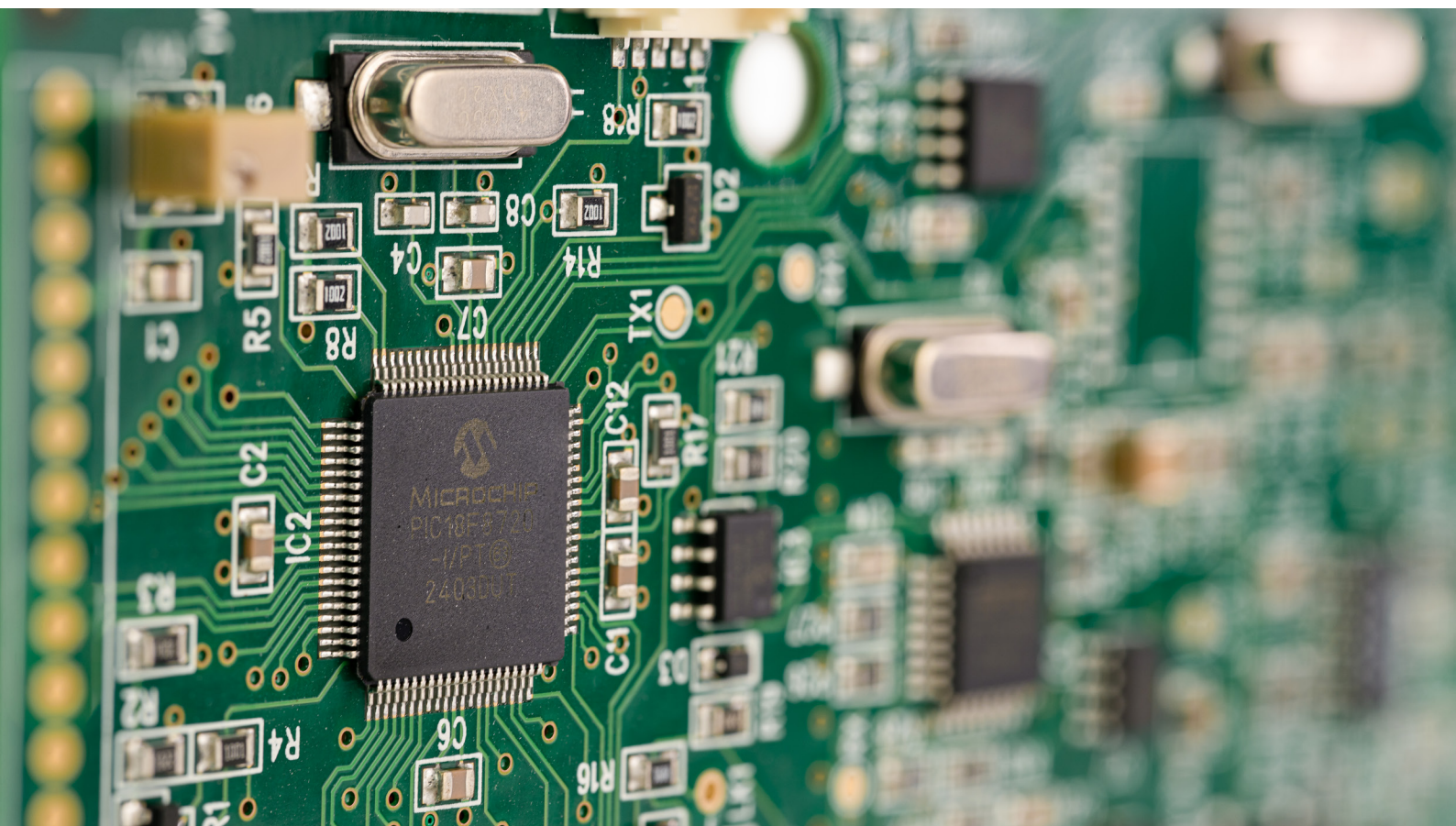
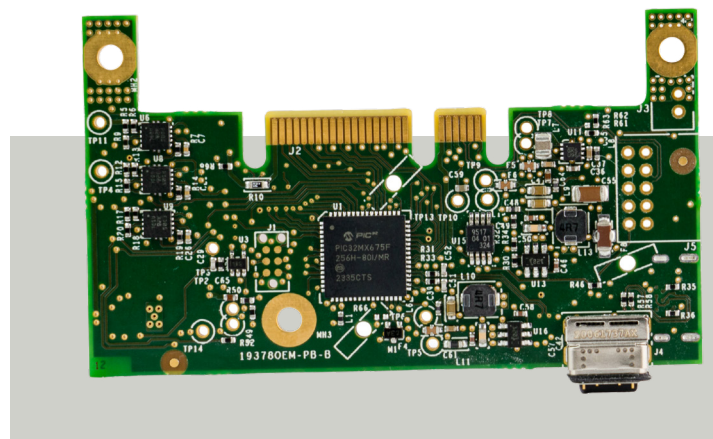


ISO9001 & ISO13485 Surveillance Audit – Zero Non-Conformances!

EMS is delighted to share that our December mid-surveillance audit for ISO9001 and ISO13485 was successfully completed with zero non-conformances identified.

This is a testament to the hard work, dedication, and adherence to our quality processes demonstrated by every member of our team.

These internationally recognised certifications ensure that we maintain the highest standards in quality management and regulatory compliance, providing our customers with full confidence in our manufacturing capabilities. Passing the audit with no issues highlights our commitment to continuous improvement and operational excellence, reinforcing our position as a trusted and reputable electronics manufacturer.



Supporting Prefect Controls – Smarter Energy Management

EMS is proud to be supporting Prefect Controls in delivering smarter energy management solutions for multi-occupancy accommodation.

Energy efficiency is an increasingly important factor in modern building management, and Prefect's innovative systems provide a highly effective way to monitor and control energy usage.

Through advanced technology and precision control, Prefect has successfully halved heating energy load, resulting in an impressive £70K saving. EMS has been instrumental in manufacturing the high-quality electronic components that power Prefect's solutions, ensuring that their systems perform to the highest standards. A full case study detailing the project and savings achieved is included in the attached PDF.

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Advertorial

The smarter way to monitor and control energy in multi-occupancy accommodation

Electronic Manufacturing Solutions Ltd, supporting Prefect Controls - £70K saved as heating energy load is HALVED!

The Refinery is a purpose-built student accommodation development in Leeds. It opened in 2021. A combination of studio and bedroom cluster flats accommodate 407 residents. Fresh Student Living manages the scheme on behalf of specialist investment company Curlew Capital.

Kristian Mills, Director of Asset Management at Curlew Capital is responsible for the mobilisation of properties and ensuring they are operated effectively.

He explains, "Over the first two of years of operation we found that we were spending more on utilities than we had expected for a property of this size. Students were able to override the programming on the heaters, turning them up to maximum and leaving them running continuously. To exacerbate the high use of electricity, windows would be opened and closed to regulate temperature. We were witnessing huge wastage. Costly in monetary terms, but as a company fully committed to its 2050 net-zero targets we needed to seriously consider this impact. One of the big things we identified, within our capability, is the control of energy for heating."

Kristian sought to reduce this, "There were several solutions where sensors are placed in the bedrooms. They provide information on humidity, CO₂, light etc. and had PIRs so you could monitor occupancy. But there weren't many that **controlled** what was going on in individual rooms. I've been in student accommodation 20 years and have come across many heater panels with boosted control functions. I'd never come across anything where you can centrally control the heating system."

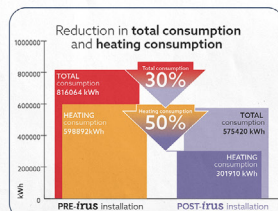
Kristian discovered Prefect Controls. They were confident that Irus could sort the problem and return results promptly.

Irus is Prefect's Building Energy Management System developed specifically for student

accommodation. Control units in each room monitor conditions, and switch heaters on and off. The control units communicate with a central hub connected to the web-based Irus Portal. Managers monitor and control individual rooms remotely.

Irus doesn't restrict heating. It avoids **unnecessary energy consumption**: reducing heat input when rooms are unoccupied; windows are opened; and when occupants leave a room that's in Boost state.

"There were three distinct factors that decided the deployment of Irus", Kristian continues, "The availability of data on bedroom usage; Lowering of energy costs; and reduction of our carbon footprint."



The first year's performance is impressive.

- Heating energy **halved** 598,892kWh to 301,910kWh
- Total electricity 816,684kWh down to 573,420kWh
- Proportion of electricity for heating - 73% down to 52%

Advertorial

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- **50% reduction per bedroom** (1,146kWh to 738kWh)
- **Almost £70,000 saved**

The Head of Energy and Sustainability at Prefect has analysed the data. Gareth Chaplin explains, "Although first year figures are impressive, I can see potential for even greater savings. As operators familiarise themselves with Irus, there are tweaks to settings and profiles that will maximise performance."

Kristian is clear about residents' comfort, "It's important to emphasise there is no restriction in the provision of heating for our guests. If residents need more warmth, managers can increase temperature, and lengthen boost times etc. It's essential that residents are comfortable. But to run an efficient property and avoid waste, we must be able to monitor energy input and control delivery."

He continues, "Going forward, we want to make Irus the standard specification for each property. We don't want to have to retrofit heating systems, just make sure that the best possible system is installed, one that provides most information and control."

He concludes, "To see 50% reduction in heating load and close to £70,000 saved is phenomenal! We anticipate a return on investment of just over 3 years. These results highlight just how effective Irus has been."

Manufacturing excellence

This is where EMS comes in. Having worked with Prefect Controls for 15 years, EMS has been

involved from the onset in getting this product to where it is today.

EMS is an award-winning electronics manufacturing service provider based in Newbury, Berkshire. Founded in 2007, our teams specialise in surface mount technology (SMT) and printed circuit board assembly (PCBA) — using top-of-the-range equipment to deliver outstanding results every time.

We know that the current manufacturing industry isn't exactly synonymous with sustainability. So, being passionate about our responsibility to protect the planet, we're on a mission to change that and are proud to be involved in Irus.

And we're not stopping there...

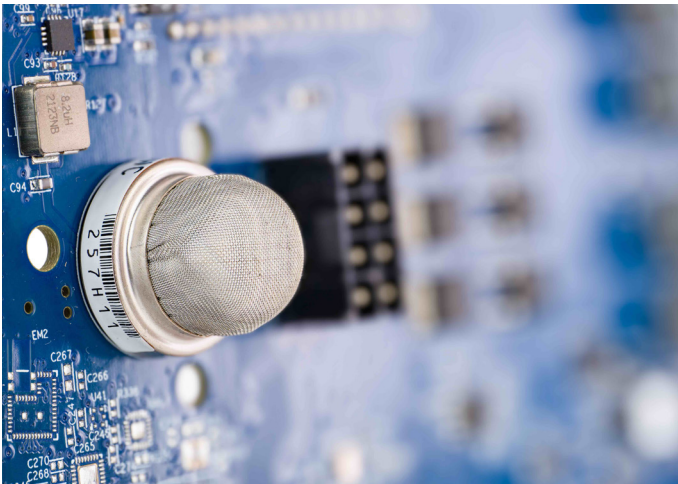
In an effort to develop an effective environmental management system and reach net-zero by 2050, EMS is working towards ISO 14001. This internationally recognised standard sets the criteria for formal climate impact reduction strategies and helps companies like us do our bit to help the planet. Anyone attending Southern Manufacturing and Electronics 2025 can learn more about our services and sustainability commitments at our stand during the exhibition.



Electronic Manufacturing Solutions

Looking Ahead – A Strong Start to 2025

As we move through 2025, EMS continues to build on a strong foundation of growth and innovation.



The year has already seen significant developments, with new projects underway across multiple sectors and exciting opportunities on the horizon.

We remain committed to delivering high-quality electronics manufacturing solutions, strengthening relationships with existing clients, and forming new partnerships. With a dedicated team, a focus on innovation, and a reputation for excellence, EMS is looking forward to another year of success. Thank you to all our customers, partners, and colleagues for your ongoing support – we look forward to working together throughout 2025 and beyond.

