WELCOME TO
FermionX

MANUFACTURING

ABOUT US

Our 50 years' experience ranges from PCBA and sub assemblies, to fully integrated box build, test and shipping fulfilment.

We bring together a wealth of skills for the world of product manufacturing, supporting our partners with their production growth ambitions.

MEET THE TEAM

Gary Rice

As Technical Sales Manager, my role is to assist you with all of your technical onboarding requirements

Scott Jones

My role as Business Development Manager is to liaise directly with you regarding all aspects of your journey with us

NEW FOR 2024

In order to further enhance our capabilities and production growth for our customers, we are proud to announce that we are now **ISO 13485** certified.

By updating our premises as well as our software systems, our certification assures you of the highest quality standards. Reducing product risks, improving traceability and ensuring safe and effective products that can be relied on in critical environments.

01. **OPTIMISING YOUR PRODUCTION**
We can provide the manufacturing support needed to help grow your production

02. **DELIVERING QUALITY**
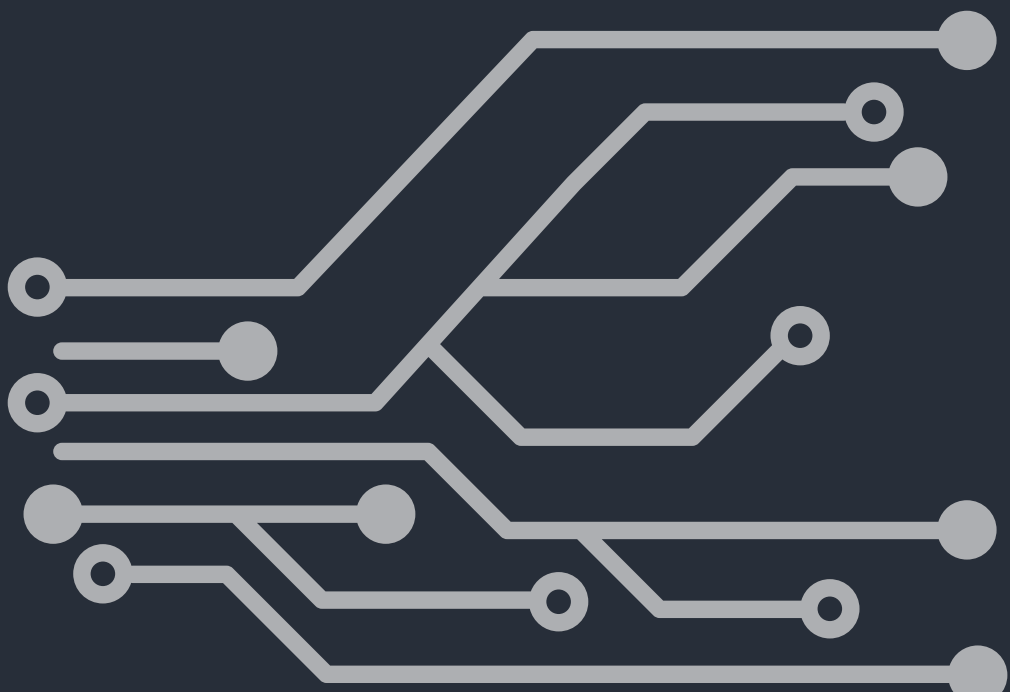*We are committed to the highest standards of system and process controls*

03. **WORKING WITH YOU**
Our open communication with customers ensures that your journey with us is built to last

04. **NEXT STEPS**
What's next? Where to find any additional information and who to contact.

01.

OPTIMISING YOUR PRODUCTION

PCB ASSEMBLY

FermionX has an extensive PCB assembly service capability which allows us to successfully support from basic to the most complex circuit design, tailored to suit your requirements.

- Surface mount assembly
- Conventional PCB assembly
- Sub-assemblies
- Quality control
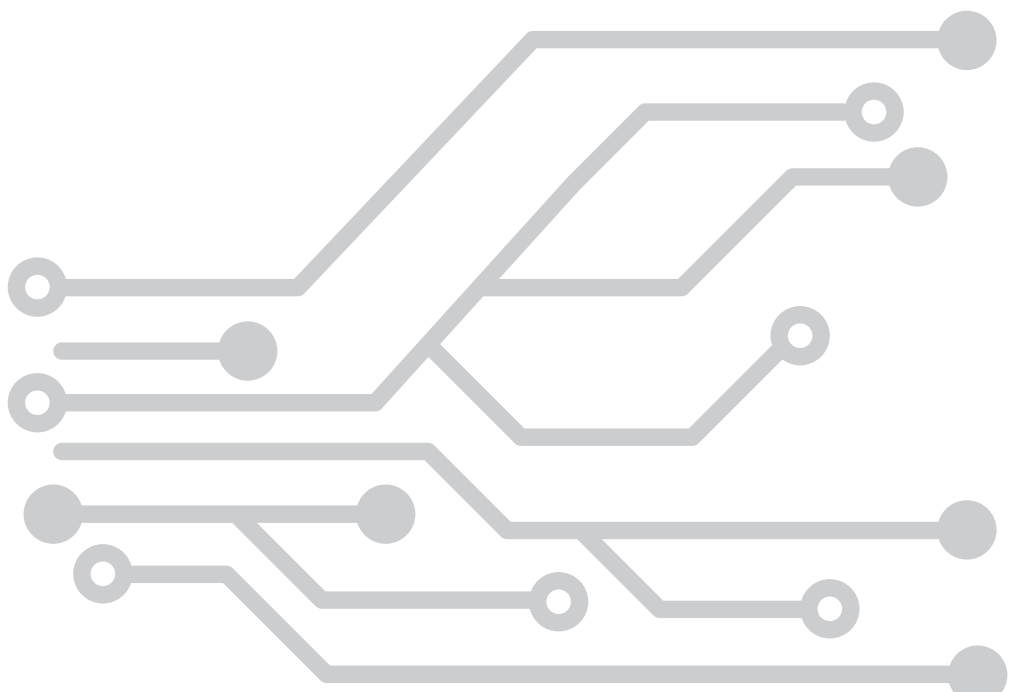- Full inspection and test

BOX BUILD ASSEMBLY

Our box build service provides bespoke solutions to fit your needs. From simple PCB and cable-fitted sub-assemblies, to integrated enclosures with electromechanical assembly.

- Review of all documentation
- Testing/programming specifications
- Traceability requirements
- We can also support on product branding and packaging to fit global distribution requirements

INDUSTRIES

No matter what industry you operate in, our extensive experience and state-of-the-art facilities can support your production.

AUTOMOTIVE

MEDICAL

AVIATION

OIL AND GAS

LIGHTING

MARINE

AUDIO

DETECTION

MILITARY

PLANT LIST

SURFACE MOUNT - 3 LINES:

- Speed Print SZ-Z10AVI
- DEX Horizon - 03ix
- 4 x I-Pulse (3 I-Pulse M20, 1 x I-Pulse M10)
- IBL Vapour Phase
- 2 x Iemme Plus 14
- Interflux Solder Paste Conditioner
- Memmert Oven

CONFORMAL COATING:

- PVA2000 Selective Coating System
- Hand-held DCA200H in a clean extracted booth

CONVENTIONAL:

- Ecoselect-1 selective soldering system
- Robottas Mascott
- Component Pre-Forming
- Cropmatic
- Easy cut nibbler
- Easy cut Depaneller
- Metcal MX5200
- Metcal handheld convention tool
- Metcal Bvx-200 Fume extraction
- Wave Solder

INSPECTION:

- 4 x Mantis Elites
- ERSASCOPE M&M Plus
- AOI FX-940
- 2 x Inspex HD 1080p Cameras
- Nordson Dage Quadra 3 x-ray with x-plane

MISC:

- BGA Rework station
- MARTIN mini oven O5
- X-Treme Dry Cabinets
- System 2000 Aqueous PCB cleaning machine
- Markforged Onyx Pro 3D Printer
- Super SWASH III Twingo

DETECTION INDUSTRY CASE STUDY

01. THE COMPANY

Our customer is a world leader in the design and manufacture of high voltage generators, X-ray generators and X-ray controllers. Having been at the forefront of X-ray component design for almost 40 years, their products range of X-ray tubes, high voltage cables, coolers and complete turnkey sub-systems.

02. OUR SOLUTION

Our team provides call off orders to benefit the customer. We have also massively increased our production capacity for them with our volume almost tripling. This further involves increased stock holding. We additionally invested in selective solder, mascot and X-ray inspection.

03. THE JOB

Our customer wanted a supplier who could manufacture large conventional assembled boards for more of their older products, and more mixed assemblies for their newer ones. FermionX were the perfect fit with our team trained to J-STD-001 and IPC-A-610 standards. Their product requirements involved SMT, conventional PCB assembly and X-ray inspection.
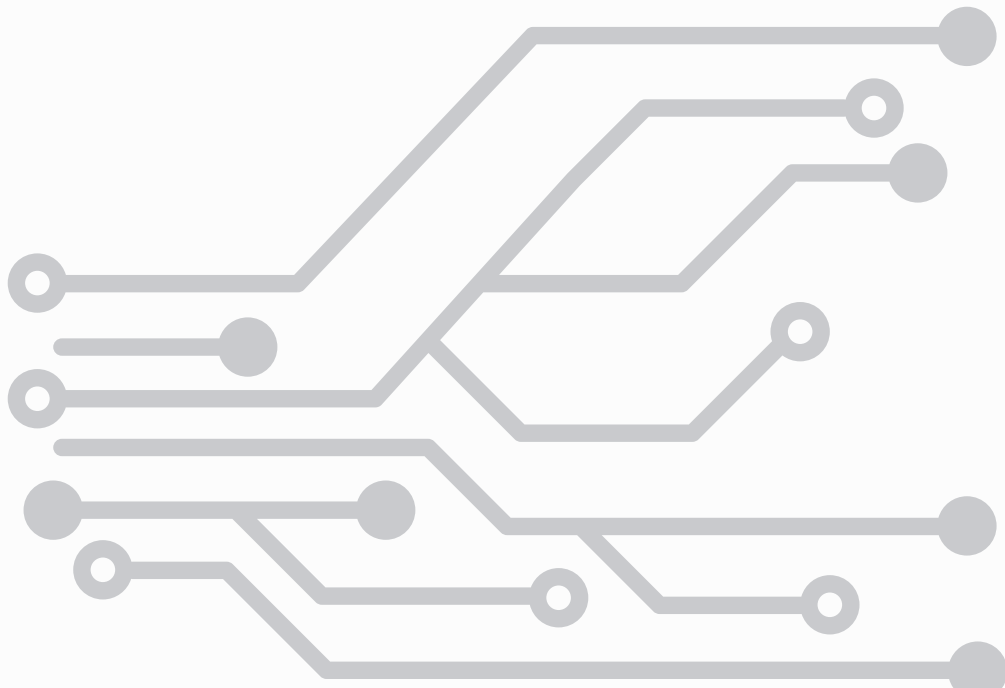
04. OUTCOME

We have now been working closely together for over 20 years. So far we have built 2392 PCBs and approximately 59 different products for them in 2023. Our relationship continues to grow as they become increasingly satisfied with our team's capabilities and effective communication.

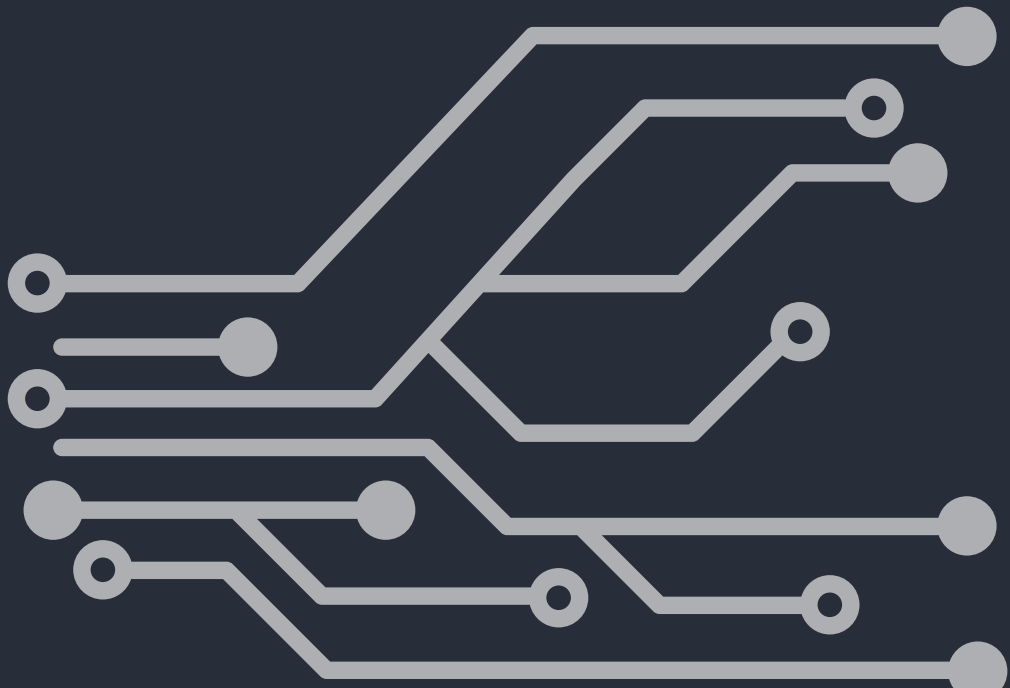"FERMIONX HAVE SUPPORTED US FOR OVER 20 YEARS AS WE'VE DEVELOPED NEW PRODUCTS.

THEY ALWAYS UNDERSTAND OUR DESIGNS AND WAY OF WORKING, THEY ARE COMMERCIALLY COMPETITIVE TOO."

**Detection Industry Partner
Supply Chain Manager**

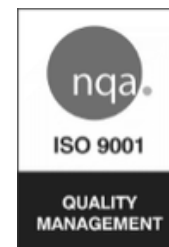# O2.

DELIVERING QUALITY

MAINTAINING HIGH STANDARDS

We work proactively to identify, mitigate and resolve any risks to your production.

FermionX holds **ISO 13485**, **ISO 9001** and **IPC-A-610, J-STD-001** certification.
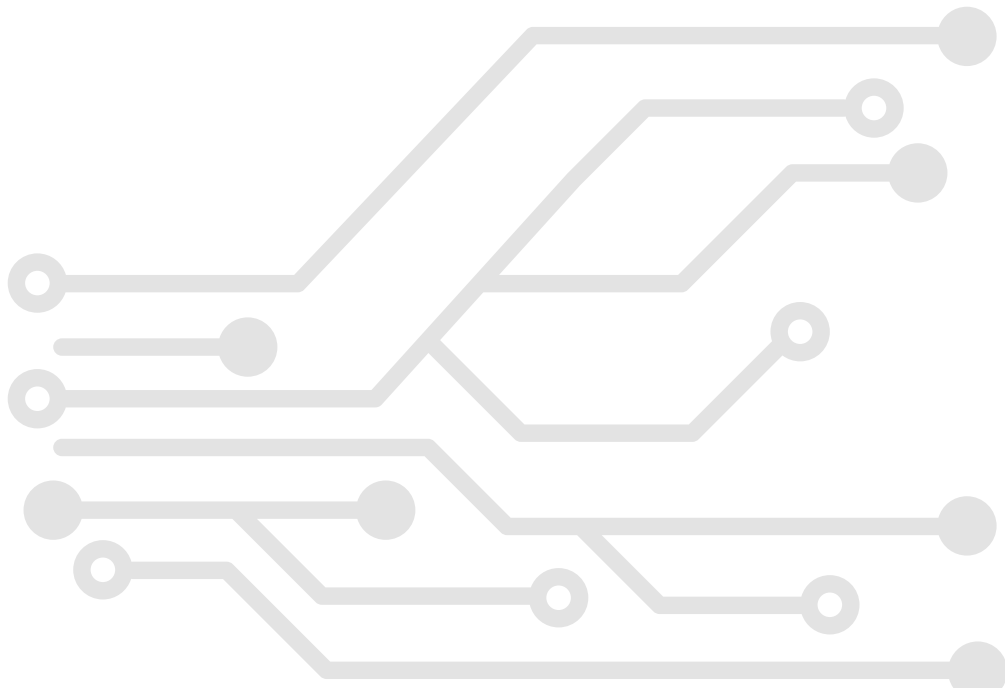
We also operate to the requirements of ISO 14001 for environmental management systems.

We have a rigorous culture of quality control through our process control systems and supplier partnerships.

TRACEABILITY AND PLANNING

In order to achieve **ISO 13485** certification and improve our overall quality processes and traceability, we've invested in a new ERP/MRP system. This plans out production timelines and provides you with transparency in sourcing components and their origins.

ENHANCED PRODUCT PROTECTION

We've also implemented stringent EPA protocols, including access control testing. ESD protection equipment and lab coats have been provided to all production staff. Air conditioning has been implemented to ensure that our factories are fully climate controlled.
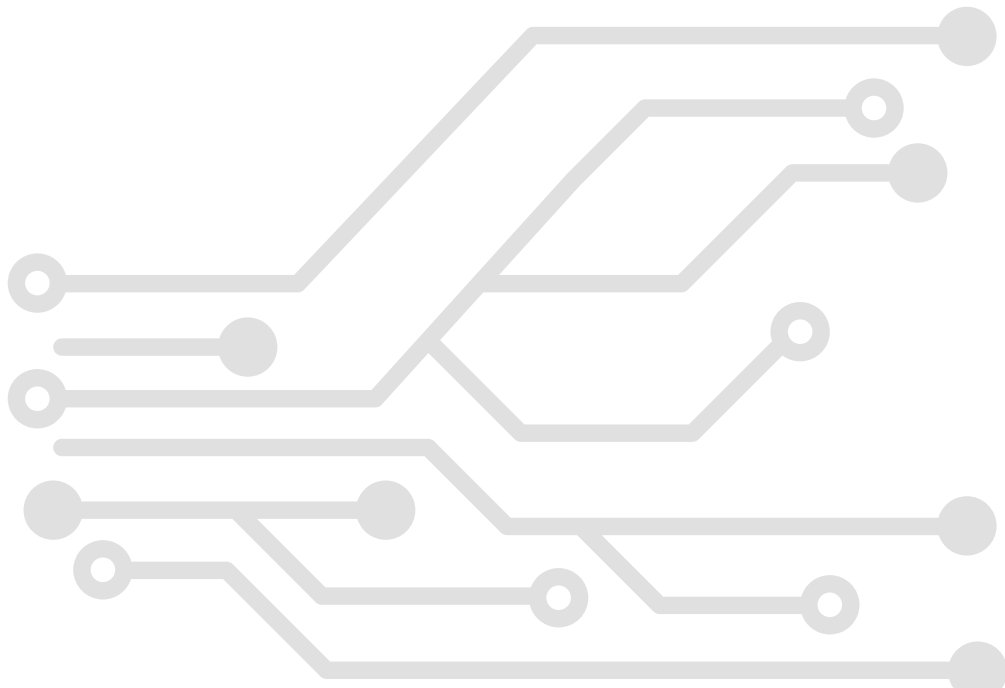
SUPPLY CHAIN

Our supply chain management experience and network of trusted suppliers ensures you receive technical advice as well as reliable products.

At FermionX we offer sourcing support when components become obsolete. If an end-of-life notice has an impact on your product(s) our team proactively source and provide you with a minimum of 1 alternative.

TRAINING

We have an internal IPC-A-610 and J-STD certified trainer for continuous training for our production staff.

We also offer ongoing training support for all of our team the chance to upskill or retrain in new areas and support career development.

CLEAR COMMUNICATION

We can track the status of your production from start to finish, providing you with real-time updates. As you will always be in the loop, you can trust that your production is on track.
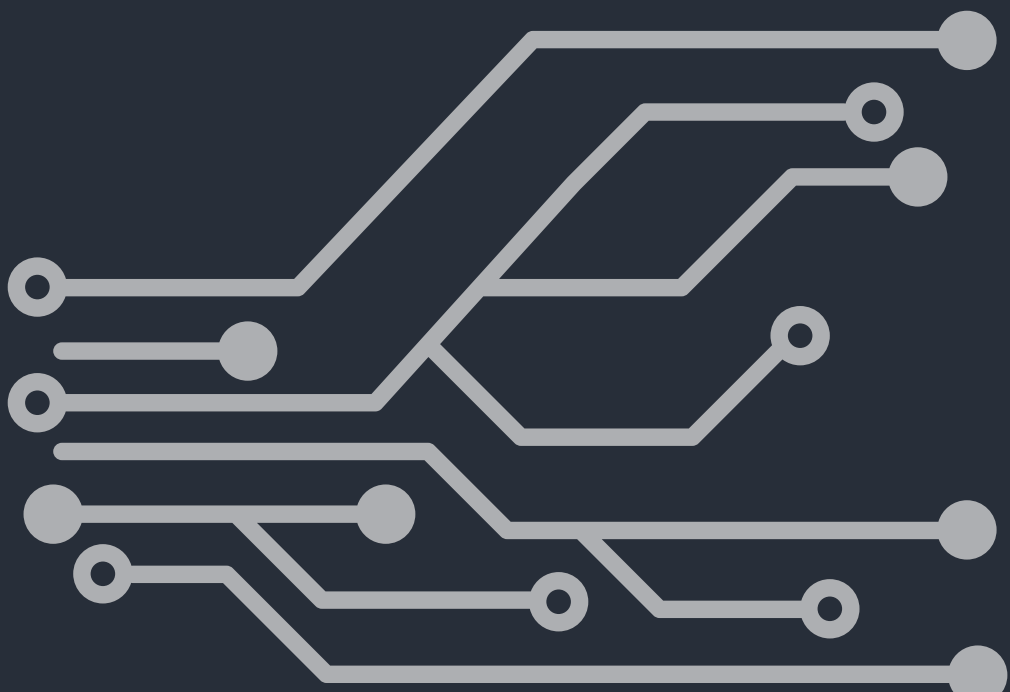
INCREASED CONFIDENCE

Rest assured that you're working with a CEM that is dedicated towards continuous improvement and delivering high-quality products. By leaving the manufacturing expertise in our hands, customers can focus on their core competencies.
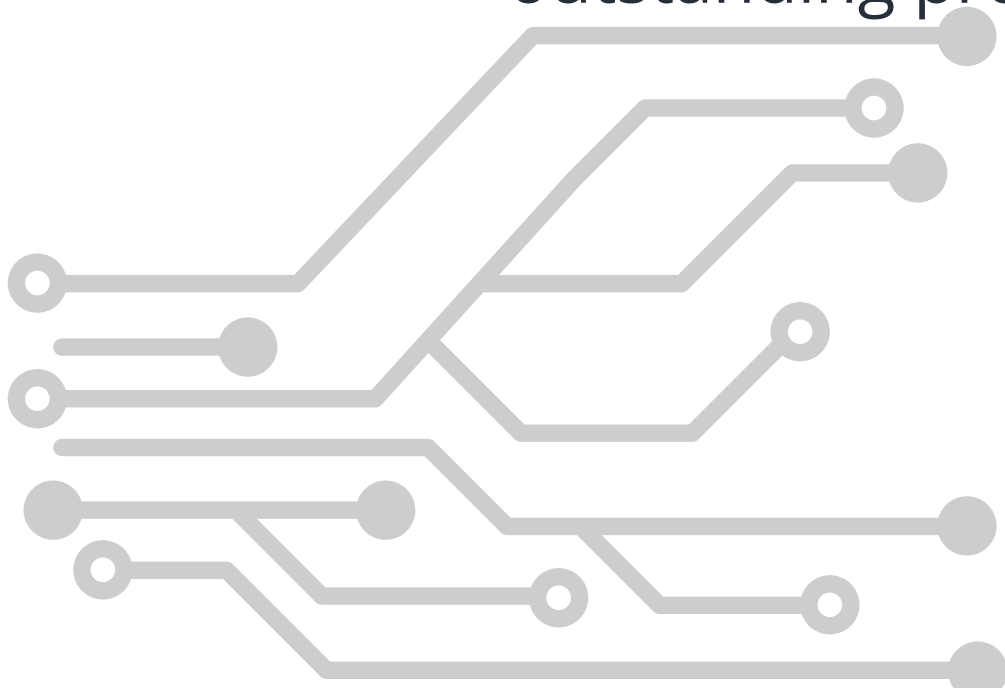
03.

WORKING WITH YOU

OUR PROCESSES

Our transparent and open communication ensures that your journey from idea to finished product with us is streamlined with full control of your product.

We work proactively to identify and diminish risks to your production and supply chains, guaranteeing consistent outstanding product support.

1 Request for quote

Your specification requirements and documentation will be set up on the system to be reviewed.

2 Process Control Review

Data and documentation are reviewed to ensure completion and confirm the project's fit for manufacture.

3 Supply chain management, costing and agreement

The cost and lead time of the job will be estimated via our network of trusted suppliers and quote sent for customer approval.

4 Engineering and process control

Our Engineering Team will fully review the job to be signed off. After sign off, tooling and stencils will be ordered and production/inspection packs released.

5 Production

Once stores have received and kitted the components the job is programmed into the relevant machines and production will start.
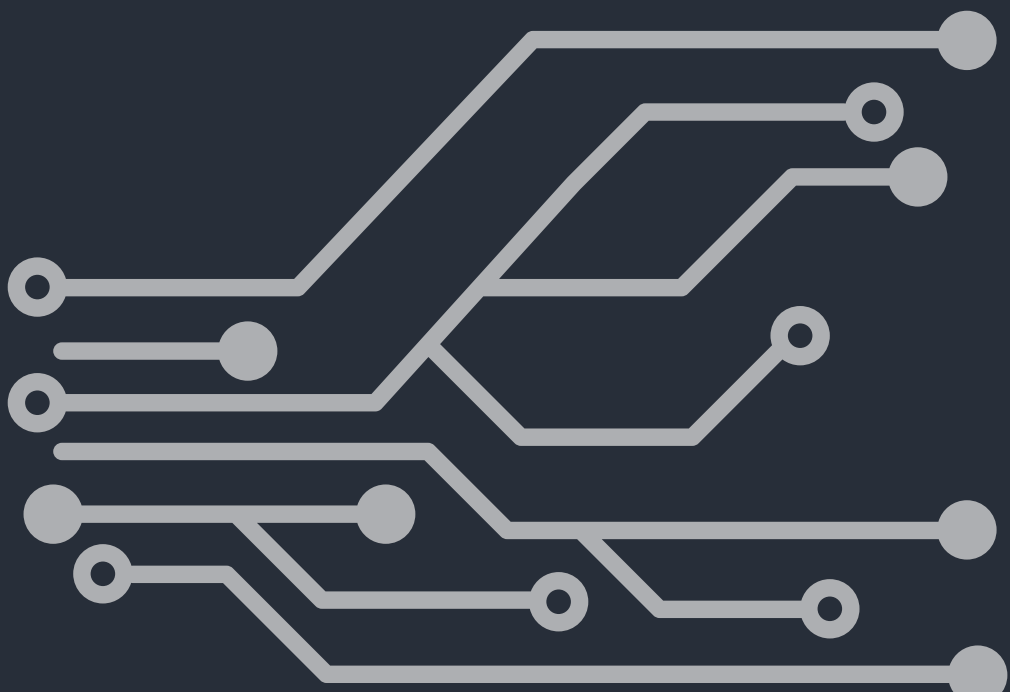
6 Final product and shipping

Once the product has been approved it will make its way to the dispatch team who will arrange for delivery via our chosen network of trusted logistic partners / suppliers.
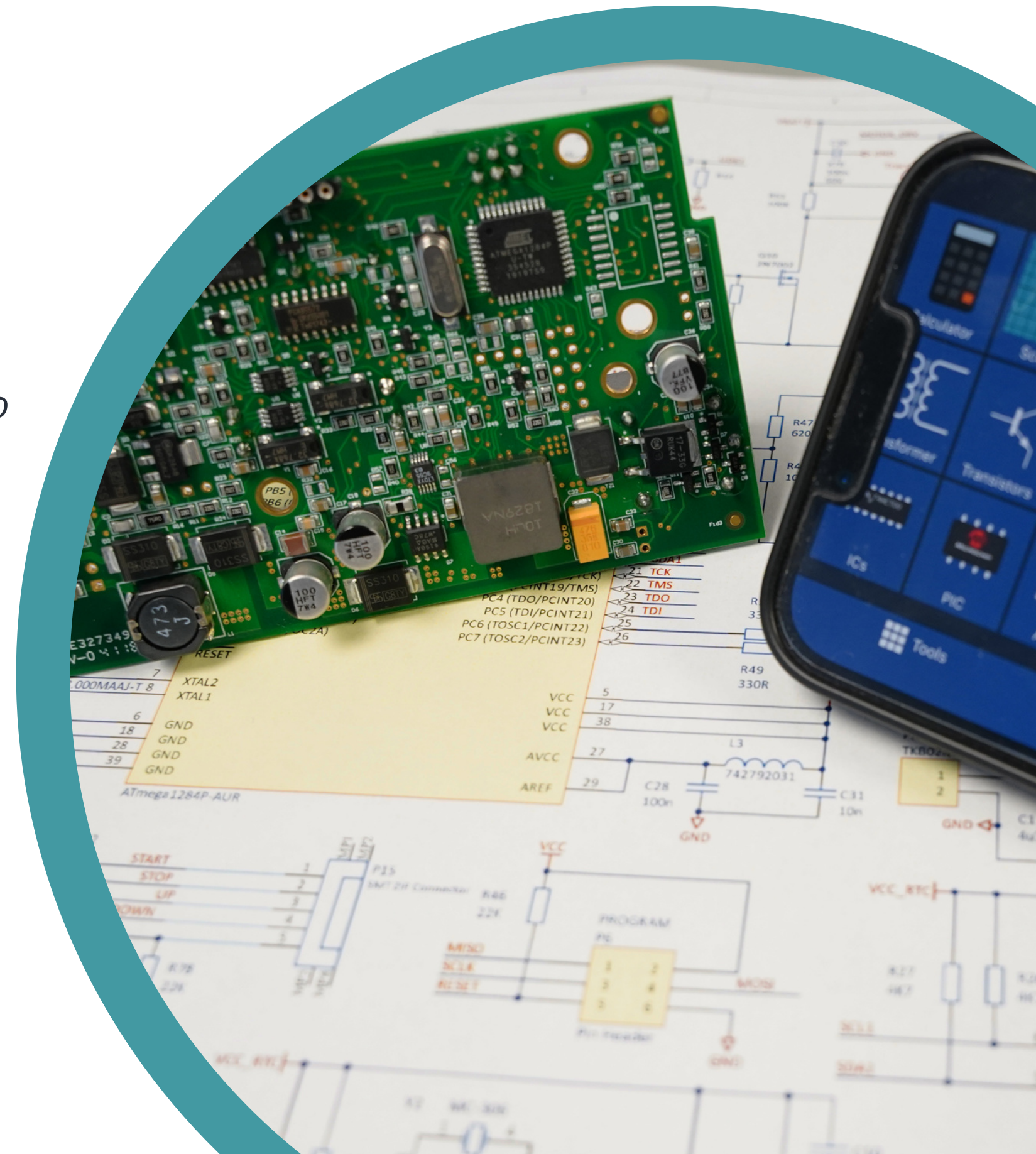
04.

WHAT ARE THE NEXT STEPS?

Next steps

01. **ARRANGE A MEETING**
We can catch up via teams - or if you'd prefer to meet in person, we'd be happy to welcome you here (with a light lunch) or come and visit you.

02. **SHARE TECHNICAL SPECS**
If you require an NDA, please feel free to send yours or we can share our standard agreement. Send over any technical queries or documentation that you would like reviewed by our team

03. **GET IN TOUCH**
We're happy to help and are on hand to support you with any questions you have.

THANK YOU