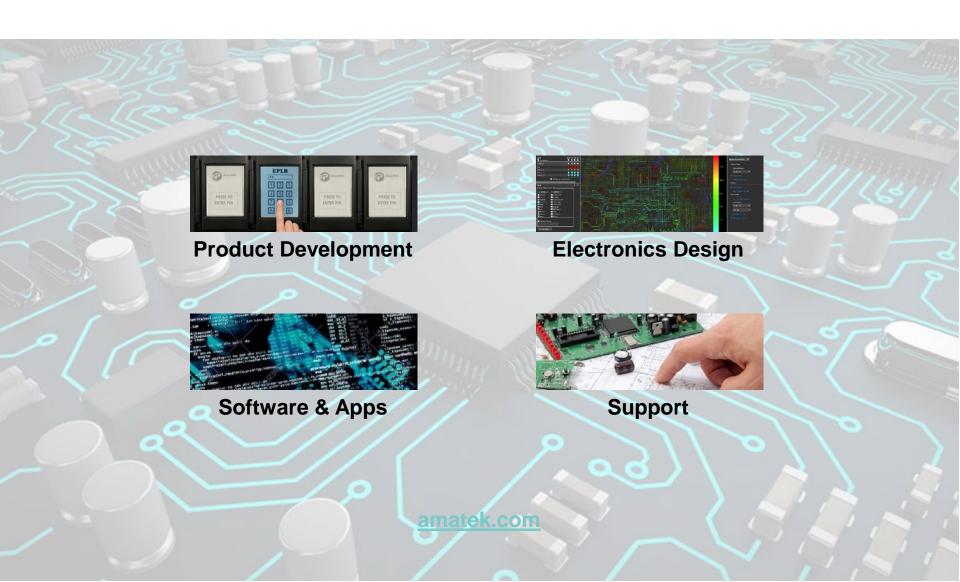
Helping innovative Australians create AMAZING electronic products.



Who We Are

- We're a team of Product Designers, Electronics Engineers and Software Developers based in Sydney.
- Our core expertise is Embedded Systems Design.
- We create manufacturable designs that meet or exceed customer expectations.
- We're the innovators behind many successful start-ups.

What We Do

- Electronic Product Design, covering:
 - Technology Research & Evaluation
 - Functional Specification Development
 - Embedded Systems Design
 - Software and App Development
 - Industrial Design
 - Introduction to Manufacture

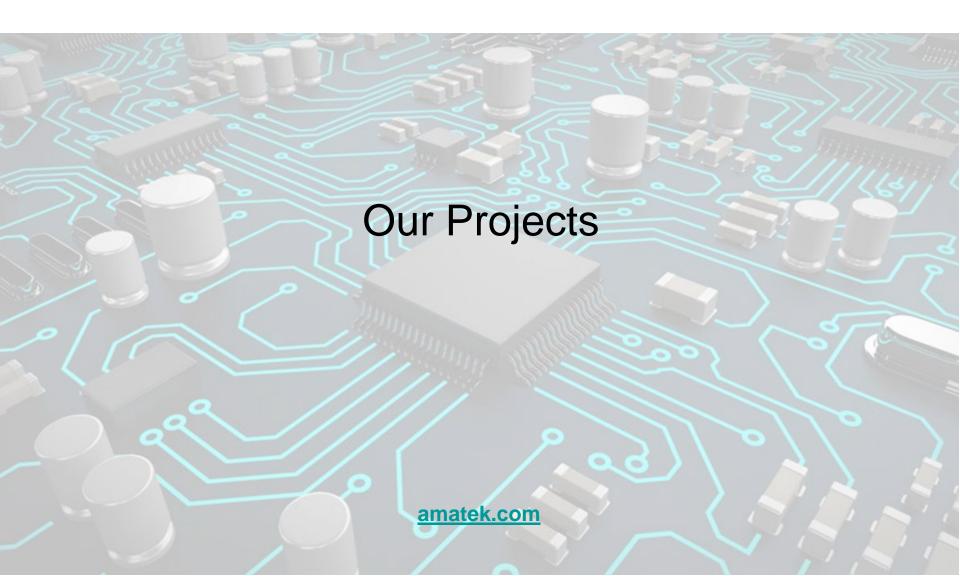


- Hardware Design:
 - Digital, Analogue and RF
 - Circuit Design and Schematic Capture
 - PCB Layout and Routing
 - Design Simulation and Optimisation
- Software Development:
 - Embedded RTOS
 - Android, iOS, Windows and Linux Application Software

- RF Communications, including WiFi, BLE 4.0/5.0, LoRa,
 Cellular and Satellite
- Biometrics and Access Control
- Audio and Broadcast
- LED Lighting Control
- HMI and Touch Controls
- Digital Display Systems
- Manual and Automated Production PCB Test Jigs

- Products for regulated environments, including:
 - Medical
 - Power Metering
 - Safety
 - Power Transmission

- Pre-Production Support:
 - EMC Compliance and Electrical Safety Testing
 - Introduction To Manufacturing Documentation
- Manufacturing Services:
 - Component Sourcing and Kitting
 - Product Prototyping
 - Pilot Production Management
 - Mass Production Management



loT Enabled Automation



Farmbot ®

We designed the LoRa, 4G LTE and satcomms modules that helped Farmbot rapidly become Australia's leading farm automation solutions provider.

Since their introduction, these modules have performed flawlessly, exactly as they were designed to do.

MedTech



Corsonis ®

We created a functional, wireless, wearable proof-of-concept cardiac sounds monitor with advanced noise cancellation and Bluetooth connectivity.

Called the COR-S, it's at the heart of this potentially revolutionary remote TeleHealth/eMedicine solution.



Powerpal ®

We developed the long range Bluetooth system that's helped skyrocket Powerpal to the lead in home power management.

With more than 60,000 units shipped, Powerpal is helping Australian households monitor power consumption and reduce their energy bills.





Ventific ®

We designed the motor control system for Ventific's prototype positive pressure ventilator system.

It delivered the accurate and reliable pump control required for this unique, non-invasive therapeutic product.

Consumer Wearables



Nuheara ®

Our client was told no Australian electronics design company could create the complex, miniaturised PCBs required for their unique earbud concept.

We proved the critics wrong and helped this startup get into mass production within a year to compete in this rapidly growing and highly competitive market sector.



Peoplekey ®

We've helped Peoplekey establish and maintain their position as Australia's leading cloud-based biometric time and attendance solution.

From embedded systems design, to development and maintenance of the cloud database systems, we're a key development partner.



Emotiv ®

We overcame the technical difficulties that prevented our client getting their novel wearable multi-channel ECG headset to market.

Called Insight®, it's now their multi-million dollar a year flagship product, and one of a suite of wireless, wearable ECG devices we helped create.





Post PNG®

We created a PO Box solution using elnk touch controls to provide keyless access.

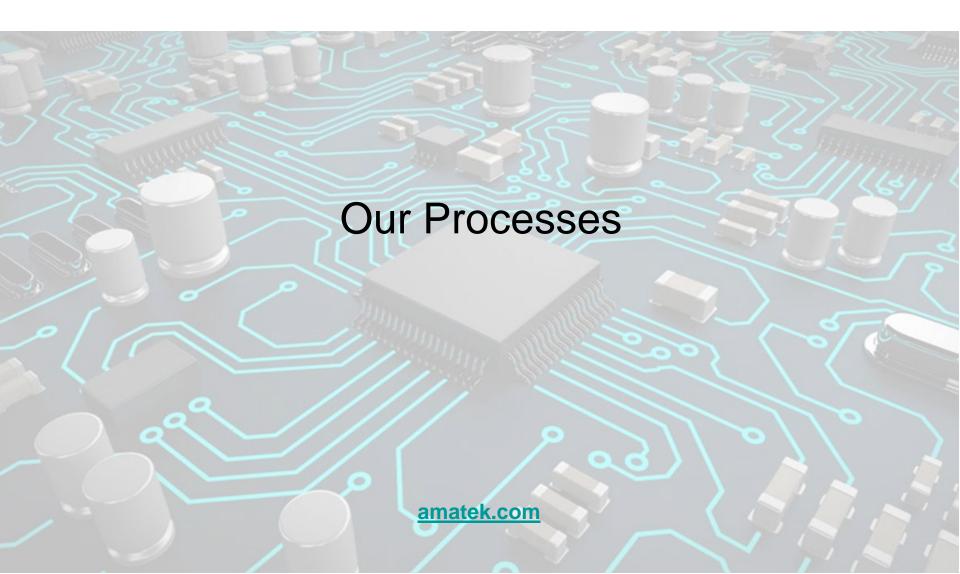
Not only did the solution do away with the expensive key management aspect of their operation, it included SMS alerts that helped automate customer notifications and billing.



CONDOR ®

This collaborative R&D project for Defence resulted in novel solutions for achieving autonomous flight for an allelectric, heavy lift cargo drone.

With applications in the rapidly growing cargo drone sector, as well as emergency services, this bleeding edge design showcased our ability to create innovation ecosystems and deliver novel, world-class solutions.



Our Processes

- First, we ensure we understand your requirements.
- Then, develop a Project Proposal that addresses those requirements.
- Once agreed, we develop a Product Specification defining WHAT your product will do.
- We then determine HOW your product will meet that specification.
- We then develop a functional prototype.
- We then deliver production-ready samples for your review.
- When you're ready to go to market, we can even manage manufacturing of your product.

Our Processes

Stage O
Project
Planning

- Requirements analysis
- Technical overview
- Project planning
- Proposal preparation

Stage 0 is aimed at determining requirements and preparing a project plan and proposal which defines project objectives, tasks, deliverables, applied resources, timeframes and costs.

Stage 1
Concept
Definition

- Concept development & product specification
- Technical feasibility & standards compliance
- Risk assessment
- Product architectural design
- Costing, power budget, mechanics
- Component research and preliminary design

Stage 1 is aimed at determining, defining and documenting product specifications, refining the product concept, reducing risk and answering key technical and commercial questions related to the product's feasibility, form, architecture, function, performance and cost.

Stage 2

Main
Development

- Schematic & PCB design and review
- Software development
- Prototype documentation
- Verification test specification
- Component procurement

Stage 2 is aimed at designing and producing functional prototypes in the form of the final product.

- Prototype construction
- Design verification testing

Stage 3
Production
Engineering

- Production test specification
- Production test jig design
- Formal compliance testing
- Field trials & user acceptance testing
- Hardware & software refinement
- Manufacturing documentation

Stage 3 is aimed at verifying and fine-tuning prototypes, obtaining formal approvals and producing additional documentation required for volume manufacture.

Stage 4
Volume
Manufacture

- Component sourcing and kitting
- Pilot production
- Mass production
- Ongoing customer support

Stage 4 is aimed at supporting the customer during volume manufacture ramp-up, and ongoing production.

