JOB DESCRIPTION & PERSON SPECIFICATION

Job Title: Embedded Systems Engineer	**Location:** Mansfield
Department: Engineering	**Contract:** Permanent
Reports To: Engineering Team Managers	**Direct Reports:** None

1.0 Job Summary & Role

Working as an individual or as part of a team, this embedded software engineering role covers the full software lifecycle including, requirements capture, design, development and verification. The role will involve developing software for Cortex A and Cortex M series microprocessors and microcontrollers, both at low level and application level. The role exposes the engineer to a wide range of industrial control technologies and applications.

2.0 Key Responsibilities & Main Duties

- Design and implement software of embedded devices and systems from requirements to production and commercial deployment
- Translate the market requirements into technical product specification
- Design, develop, code, test and debug system software, according the technical product specification
- Review code and design
- Interface with hardware design and development
- Interface with the PC software design and development
- Perform product testing on your own and others software as required
- Fixing software issues and optimizing existing products
- Write and maintain development documentation including specifications, test plans and design descriptions
- Make use of the company version control system to write software in a controlled manner
- Visit customer sites and attend training courses identified and provided by the company

3.0 Internal & External Relationships

- Engineering and Project Management Teams
- Test and Approvals department – The Embedded Engineer will work closely with the test and approvals team
- Technical Support – Assist Technical Support with more involved customer queries, and technical authoring support

4.0 Key Performance Indicators

- Attention to detail, able to work both individually as a part of a team and self discipline required for software developing and testing
- Produce clear and concise software documentation
- High quality software development
- Ability to define and work to timescales

5.0 Essential/Desirable Factors

Knowledge	
Essential: • Expert in Embedded C • Embedded Linux • Yocto Build systems • Real Time Operating Systems, such as Free RTOS / Segger emBOS / ThreadX • Git and GitFlow • Security techniques and cybers security analysis	**Desirable:** • Other programming languages (C#, JavaScript, HTMS/CSS) • Electrical principles • Open source licensing models • TFS
Skills & Attributes	
Essential: • Familiar with stage gated / agile development approaches • Comfortable collaborating closely with electronics engineers on embedded systems • Use to work to a high-quality standard • Excellent team player with problem solving and trouble-shooting capabilities • Task breakdown and work estimations for backlog and project planning • Ability to translate requirements into a technical product specification • Enthusiastic and optimistic	**Desirable:** • Understanding of electronics schematics and hardware designs • Systems architecture design • Commercial acumen and understanding
Experience	
Essential: • 5 years + experience with embedded systems in a commercial engineering department • Used to work in a high-pace environment	**Desirable:** • Experience with setup and management of CI/CD platforms e.g. GitHub Actions, GitLab CI, Azure Pipelines • Use of JIRA for work / task management

Qualifications	
Essential: • BEng or above in Electrical and Electronic Engineering	**Desirable:**

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Engineering Department	28/07/2025