Job Description

Business / Support Function: Technical Department

Job Title: Embedded System Engineer

Mission

You will perform a vital role in the development of reliable, cost-effective, high volume fire detection products. The role involves the analysis and decomposition of product requirements and derivation of a system architecture detailing hardware, software and mechanical specifications for the respective development teams, and hands-on development of the solution.

Accountabilities:

1. The Embedded System Engineer shall work with various teams within Apollo (e.g., Production Test, System, Sustaining) and external (e.g., customers, installers) to capture product requirements as input to development projects.
2. Develop and model a system architecture that both defines sub-system (e.g., electronics, software and mechanical) and proves the fulfilment of the functional and non-functional requirements.

Authorities:

- N/A

Responsibilities:

- Lead the elicitation, capture, collation, and analysis of product requirements from various sources.
- Create logical and physical architectures derived from product requirements.
- Model the system architecture to prove fulfilment of both functional and non-functional requirements.
- Perform the design devolution and specification of sub-systems (i.e., interfaces, transfer functions, timing constraints) for hardware, software, mechanical and IVVC teams.
- Hands-on design and implementation of hardware & software as part of development teams
- Collaborate with development engineers to identify and resolve issues to maintain development schedules
- Hands-on verification and validation of solutions
- Plan and manage own tasks and time

Development Responsibilities*:*

- Create and evolve robust processes for the development and support of Apollo products.
- Coach colleagues how to define an embedded real-time system with traceability to the requirements.
- Support the identification and selection of appropriate tools for designing embedded systems.
- Promote the value of ‘knowing’ the solution works in place of ‘hoping’.

Skills and Competencies

Indicate the importance rating of each of General / Professional / Management & Leadership skills / competencies required to perform in the position.

Ratings: 1 – Basic /Satisfactory 2 – Good 3 – Advanced 4 – Expert

General Skills:	**Target level**
Customer /Vendor Service Relations	3
Cooperative Skills	3
Cost Effectiveness	2
Cultural Knowledge	2
General Finance Knowledge	2
Local Legislation	2
Negotiation Skills	2
Business Management System	2
Health and Safety	1
Organising Skills	3
Presentation Skills	3
Reporting Skills	3
Representation and etiquette	2
Self-Management	3
Teamwork Skills	3
Training Skills	2
Apollo Knowledge, Business Process Knowledge	2
Computer Skills	4
Utilise ERP Applications and Tools	2
Management & Leadership Competencies:	
Strategic Planning and Target Setting	2
Change Management	2
Team Building	2
Communication	3
Management Skills	2
Problem Solving and Decision Making	4
Six Sigma	2
Lean Principles	2
AX User	1
AX Reports	1
Professional Skills:	
Hardware:	
Simulation	2
Analogue design	2
Low power analogue design	2
Design for manufacture	2
Design for testability	2
Design for electromagnetic compatibility	1
Software:	
Embedded assembly code	2
Structured design approach	2
Documentation	2