# 0T1341 - SW Engineer Firmware I (TCP\_01)

**Job Family:** Engineering - SW Engineering (Firmware)

### **Job Family Definition:**

Analyzes, designs, programs, debugs and modifies firmware (e.g., DSP, embedded code, BIOS). Work often involves analog and digital hardware and real-time operating systems. Position requires knowledge and exposure to hardware design. Typically programs in machine language, assembly language and high-level languages (e.g., C, C++).

### **Management Level Definition:**

Contributes to assignments of limited scope by applying technical concepts and theoretical knowledge acquired through specialized training, education, or previous experience. Acts as team member by providing information, analysis and recommendations in support of team efforts. Exercises independent judgment within defined parameters.

### Responsibilities:

- Codes and programs enhancements, updates, and changes for portions and subsystems of firmware, including DSP, embedded code, EFI drivers, EFI applications and BIOS/UEFI.
- Executes established test plans and protocols for assigned portions of code; identifies, logs, and debugs assigned issues.
- Develops understanding of and relationship with internal and outsourced development partners on firmware design and development.
- Participates as a member of project team of other firmware engineers and internal and outsourced development partners to develop reliable, cost effective and high quality solutions for low to moderately-complex products.

### **Education and Experience Required:**

- Bachelor's or Master's degree in Computer Science, Information Systems, Electrical Engineering, or equivalent.
- Typically 0-2 years experience.

## **Knowledge and Skills:**

- Experience or understanding of firmware design tools and languages.
- Good analytical and problem solving skills.
- Understanding of firmware and hardware design principles.
- Understanding of basic testing, coding, and debugging procedures.
- Good written and verbal communication skills; mastery in English and local language.