## **0T1011 - Electrical/Hardware Engineer I (TCP 01)**

Job Family: Engineering - Electrical/Hardware Engineering

## **Job Family Definition:**

Designs, analyzes, develops, modifies and evaluates electrical/electronic parts, components, subsystems, algorithms, or integrated circuitry for electrical/electronic equipment and other hardware systems. Conducts feasibility studies, design margin and validation analyses and empirical testing on new and modified designs. Assists in architecture development and assessment. Evaluates reliability of materials, properties, designs, and techniques used in production. May direct support personnel in the preparation of detailed design, design testing and prototype fabrication.

## **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:

- Designs portions of engineering solutions for electrical and electronic parts, subsystems, integrated circuitry, and algorithms based on established engineering principles and in accordance with provided specifications and requirements.
- Implements established test plans for existing designs, including validation of tolerances, form/fit/function, shock and vibration, electromagnetic interference, safety, reliability, thermal generation, and system power measurements.
- Develops understanding of and relationship with internal and outsourced development partners on electrical hardware design and development.
- Participates as a member of project team of other electrical hardware 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 Electrical Engineering. Typically 0-2 years experience.

# Knowledge and Skills:

- Experience or understanding of electrical design tools and software packages.
- Good analytical and problem solving skills.
- Understanding of design for electronic components, integrated circuitry, and algorithms.
- Understanding of thermal and electromagnetic properties of materials and managing emissions.
- Good written and verbal communication skills; mastery in English and local language.