

Industrial grade multi service IoT Edge gateway development



The Product

- To develop a IoT Gateway for welding consumables to visualize the welding operations by efficiently tracking key parameters for each weld seam produced

- Interface for customer proprietary protocol to GSM network
- Used to Real time monitoring Welding Parameter and controlling from Cloud

The Challenges

- Existing SW interfaces should be maintained for Manufacturing Software and all other Re-usable components
- Module Testing shall have >90% code coverage for all critical ones
- Existing HW Board dimension should be retained for new revision
- Test point locations should be retained for new PCB revision

Our Solutions

- Developed driver for new processor and GSM chipset
- Ported customer proprietary reusable components
- Interface modules have been created with customer proprietary RTOS
- 2 revisions of Hardware have been developed
- Manufacturing Software was re-qualified for the board changes.
- Automated Module Testing (CPPunit tool) has been developed to find out the all-possible failures
- Maximum (90%) code coverage was achieved (verified with BullsEye Tool)
- Prototype development

Project Functions

- Electronic HW design & development
- Driver development and Porting
- Porting of Re-usable modules

- Prototyping & Pre-compliance testing
- SW Module Testing (Automated)