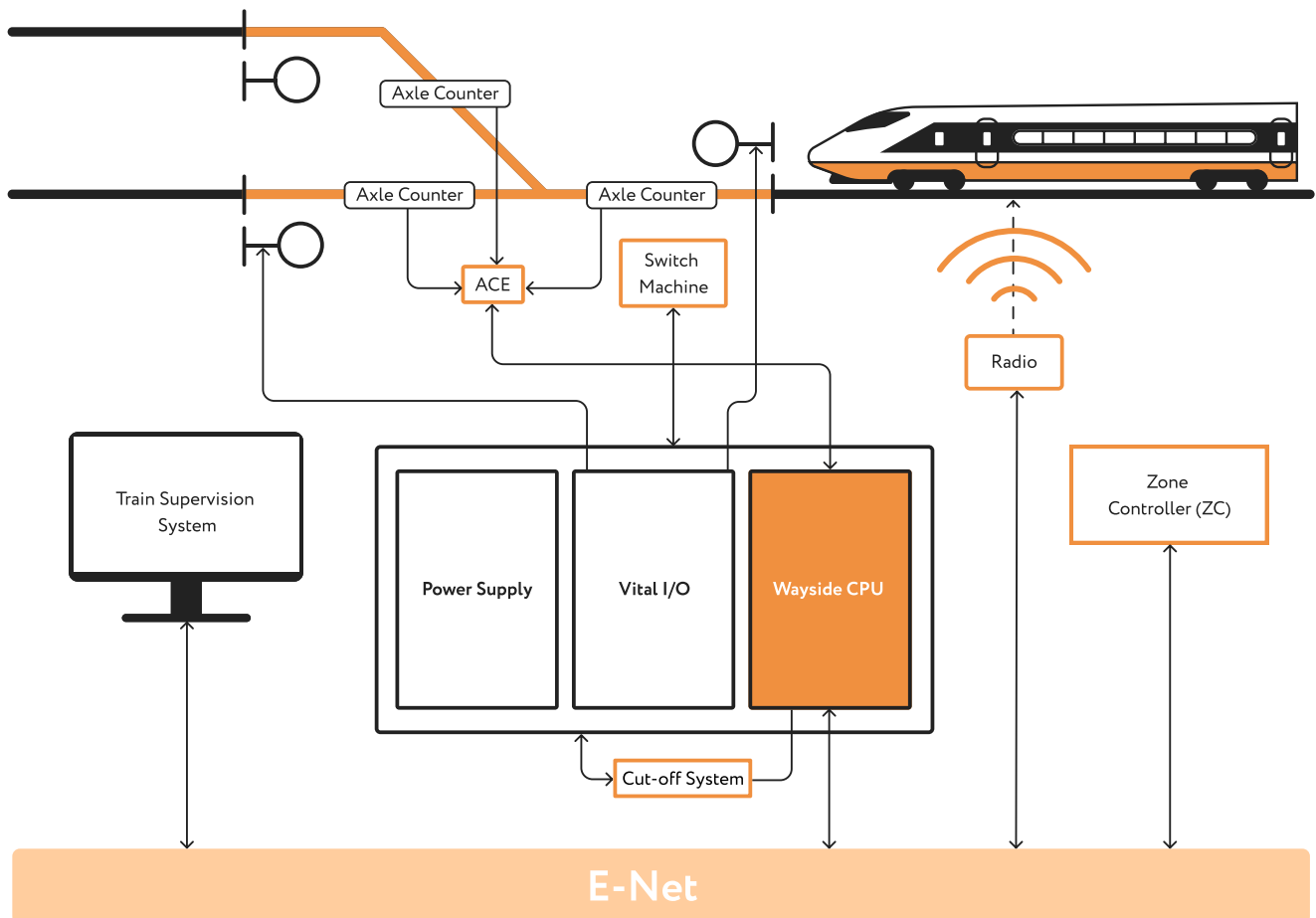


REQUIREMENTS ENGINEERING FOR THE WAYSIDE INTERFACE UNIT (WIU) EXECUTIVE SOFTWARE

Datasheet

Project objective

Perform reverse engineering of the source code of the provided Wayside Interface Unit CPU modules to create requirements documentation for them. The need for this project was due to the new processor board for the advanced signaling and PTC applications to be certified, which was not possible due to the lack of formalized requirements documentation.



Result

Requirements documentation was delivered for 25 software modules, which allowed for the brand-new wayside processor to be certified for rail applications on time. Advanced Wayside CPU allows for greater performance, flexibility, and diagnostics capabilities for rail signaling systems. Its certification enabled our client to launch modernization activities for North American railroads.

Scope of work

- ❖ Analyze software modules responsible for running various system components, such as Application Logic, Hot Standby, System Executive, and Configuration
- ❖ Describe the vital and non-vital functions every module performed
- ❖ Neutralize differences between provided source code and specifications on modules
- ❖ 2 pilot requirements items and then a completed scope

Activities

- ❖ Software Review and Analysis
- ❖ Requirements Documentation Creation

About the project

Technologies

- ❖ C
- ❖ Visual Studio
- ❖ MS Word
- ❖ DOORS



Platform

- ❖ Interlocking Hardware & Software

Project size

- ❖ 3 people

Duration

