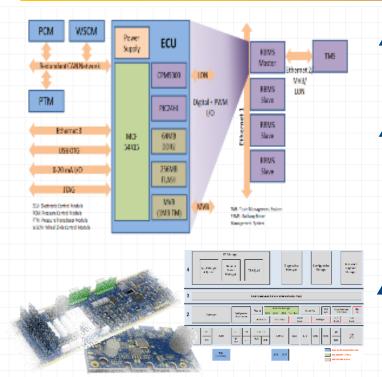
## RAILWAY BRAKE MANAGEMENT SYSTEM



Pneumatic

## **Solution Highlights**

Provided architecture for the system block diagram to meet IEC61508 SIL 2 norms
 Designed and developed complete hardware, software, and supporting applications
 Carried out functional and performance testing

## **Business Scope:**

- Concept design of overall brake system (hardware and software) in line with SIL-2
- Define Interface Control Document for 4 communication channels
- ${\scriptstyle {\it \prime\prime}}$  To meet system response time of 100ms using internal CAN communication
- I To match process safety time to less than 200 milliseconds
- I To develop high speed 12-layer PCB layout
- Hardware design including board bring-up and FAT
- I To conduct reliability analysis

## **Business Value Delivered**

Undertook complete responsibility of design, development, and testing along with dynamic project management

- Developed multiple simulators for parallel development of modules
- Generated documentation in line with IEC61508 & IEEE 1558

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	Engagement	Technology	Ownership	Outcome	Relationship
c Brake Controller Development	Product Development	Embedded	100%	Successfully Delivered	5 Years