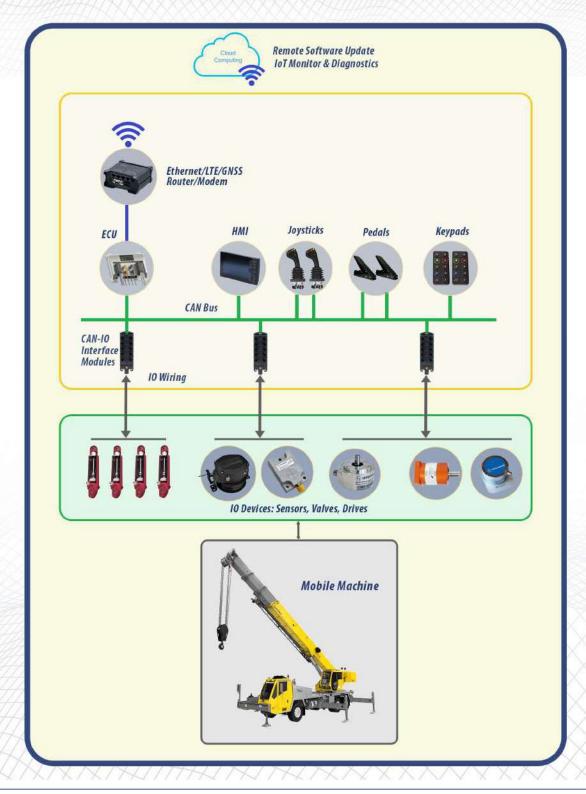


Mobile Machine Control System Based on CAN Bus





Hardware

- ECU
- HMI
- Joysticks
- Pedals
- Keypads
- 10 Interface Modules
- Ethernet LTE GNSS Modem

Cables

Power and 10 Connector Cables CAN Bus Cables Ethernet Cables Programming USB/Ethernet Module Cables

Software

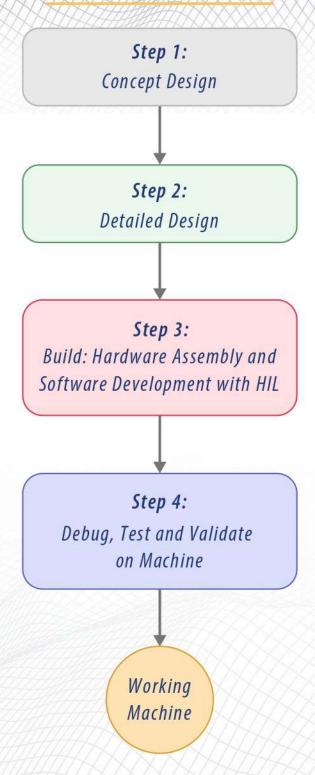
- CODESYS Vxx SPyy Patch zz for each Master Device
- CODESYS Add-on Device Support Libraries for Devices
- CAN Bus Slave Nodes: EDS Files
- Application Software for the Machine

Applications

Mobile Machine Market: Tractors, Lift Trucks, Cranes, Dozers, Backhoe Loaders, Telescoping Service Trucks, Excavators, Wheel Loaders, Planting Machines, Sprayers, Harvesters,...



Engineering Process



Concept Design of the Proposed Control System Estimated Project Cost Detailed Design Cost

Bill of Materials
Electrical Wiring Diagrams
Hydraulic Circuit Diagrams
Application Software Requirements & Architecture
Updated Project Cost

Procurement of Bill of Materials ELectrical Wiring of Control System Components Application Software Developed and Tested in HIL Environment

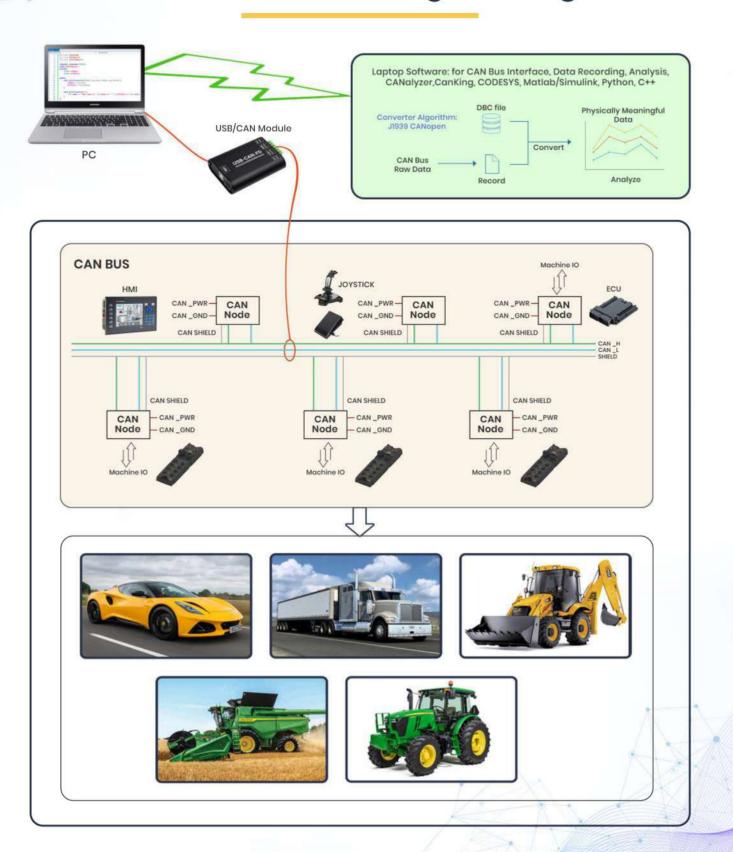
Working Control System Documentation:

- Bill of Materials
- Wiring Diagrams
- Application Software

Maintenance Plan and Service Agreement



CAN Bus Testing, Diagnostics and Validation Engineering





CAN Bus Testing, Diagnostics and Validation Engineering

Markets

Automotive, Construction, Agriculture, Mining, Marine, Warehouse Equipment.

Tools

Laptop PC, USB/CAN module, Software for CAN bus interface and data analysis; CANalyzer, CODESYS, Matlab/Simulink, C/C++, Python.

Expertise

CAN bus technology, embedded software; development, testing, diagnostics, debug and validation.

Services

- Design, Test, Diagnostics and Validation of a vehicle control system design based on CAN bus, using various protocols including J1939, CANopen, proprietary.
- CAN bus hardware design, Master and Slave node selections, configuration, programming.
- Test, diagnose, debug and validate CAN bus based operation.
- Strees-testing of existing systems for reliability.
- On-machine and remote data collection and monitoring.
- Application software/firmware upgrade.

