



# EasyEVSE EV Charging Development Platform (i.MX RT1060/i.MX RT1064, FreeRTOS, Wi-Fi 4)

## EVSE-EVCHARGING-FREERTOS

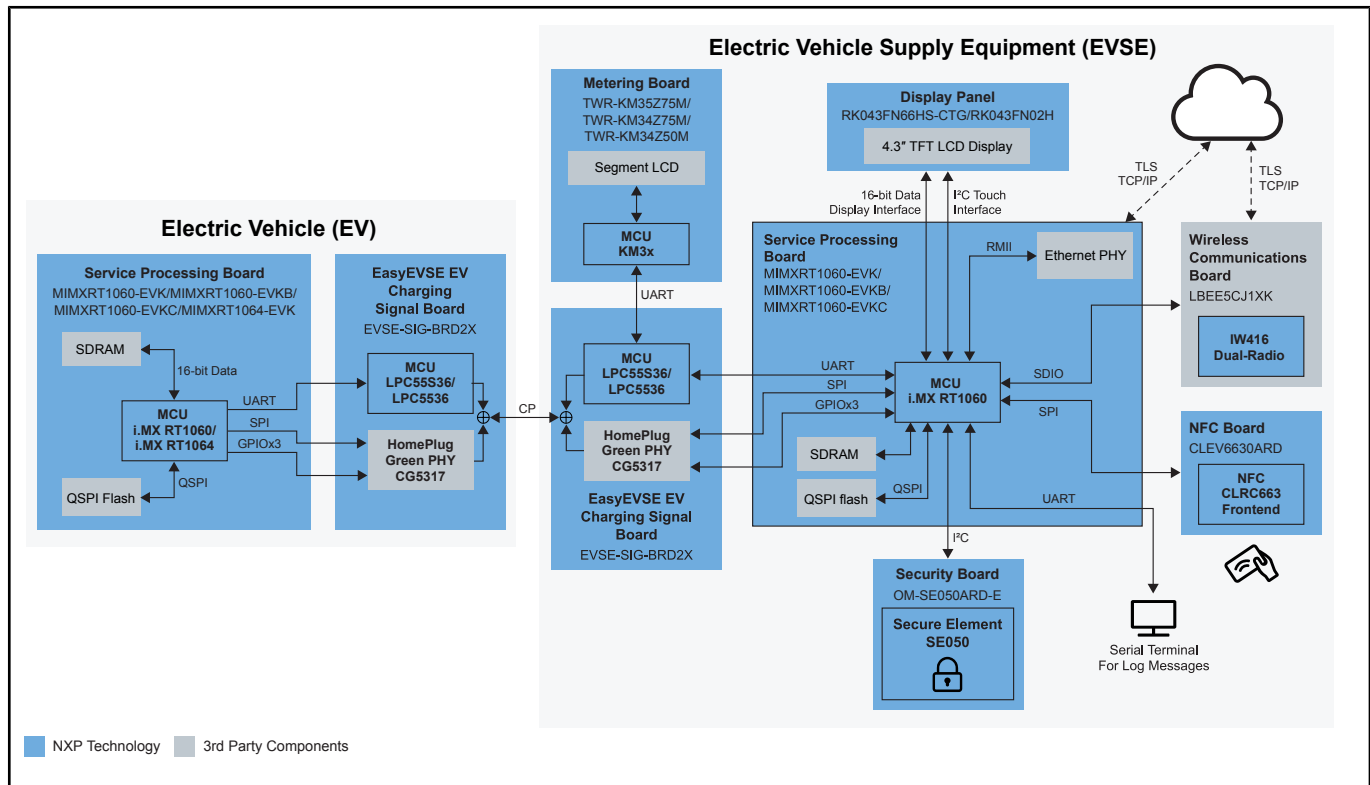
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The cloud-connected EasyEVSE EV charging station development platform provides hardware configuration instructions and example software to quickly set up a secure connection between a simulated electric vehicle supply equipment (EVSE) and a cloud-based application. Use the modular, scalable platform as the foundation to start building differentiated EVSE systems that support device-to-cloud and cloud-to-device communications, accurate energy billing and one-tap NFC authentication.

- Integrate power line communication between the EVSE and EV with the NXP EasyEVSE EV charging signal board to drive the ISO 15118-2/-20 protocol across a HomePlug Green PHY
- Communicate between the EVSE and backend service with proven open-source Everest Open Charge Point Protocol (OCPP) library
- Connect to the cloud over Ethernet or Wi-Fi via the IW416 SoC
- Authenticate cloud services such as Microsoft Azure IoT central service
- Enhance security with an EdgeLock™ SE050 secure element
- Support accurate energy billing with a pre-certified Kinetis M metrology MCU
- Authenticate with one tap using the CLRC663 high-performance NFC frontend and high security contactless NXP MIFARE DUOX smartcard IC
- Leverage NXP and partner development tools to implement other differentiating features on the same platform

The ISO 15118-2 platform variant supports traditional EV charging with a Plug and Charge feature to simplify the user experience. The ISO 15118-20 platform variant adds support for bidirectional power transfer between the electric vehicle supply equipment (EVSE) and the vehicle.

## EasyEVSE EV Charging Development Platform Block Diagram



View additional information for [EasyEVSE EV Charging Development Platform \(i.MX RT1060/i.MX RT1064, FreeRTOS, Wi-Fi 4\)](#).

**Note:** The information on this document is subject to change without notice.

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