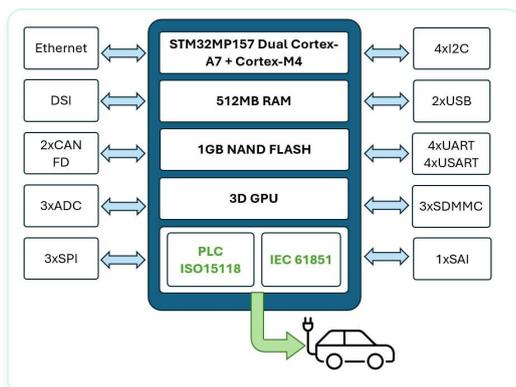


# EVSE-PLC-MP157-SOM

**KameCore**

The ultimate System on Module for next-generation EV charging stations with integrated ISO 15118 support.

Designed for scalability and performance, the **EVSE-PLC-MP157-SOM** combines the power of the **STM32MP157** (Dual Cortex-A7) with integrated **GreenPHY** technology (**Lumissil IS32CG5317**). It enables full compliance with **ISO 15118 Plug & Charge** and **V2G** standards, making it the ideal core for smart EV charging infrastructure.



## Key Capabilities

- **High Performance:** Dual-core Arm Cortex-A7 @ 650 MHz + Cortex-M4 coprocessor for handling complex applications and real-time control.
- **Integrated PLC:** Built-in GreenPHY (IS32CG5317) support for seamless ISO 15118(also included CP PWM IEC61851 components).
- **Enhanced Peripheral Architecture for Design Flexibility:** The module offers a rich peripheral set(including GPU, high-speed I/O, industrial buses, security, and display control) to enable flexible and robust system designs.

# Technical Specifications

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CPU	STMicroelectronics STM32MP157 (Dual Cortex-A7 @ 650 MHz)
Co-Processor	Arm Cortex-M4 @ 209 MHz (Real-Time OS)
GreenPHY	Integrated Lumissil IS32CG5317
CP/PP	IEC 61851 components integrated
RAM	512MB DDR3L
Storage	1GB NAND FLASH (Optional 4GB/8GB eMMC)
Ethernet	10/100M Ethernet
USB	2x USB 2.0
Interfaces	8x UART, 4x I2C, 3x SPI, 2x CAN FD, 3x SDMMC
Display	MIPI-DSI
ADC / Timers	3x ADC converters / 5x Timer Output
Security	Secure Boot, TrustZone®, RNG
Temperature	-40 to +85°C (Industrial Grade)
Dimensions	64mm x 37mm

## Software & Support

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- The module includes a preconfigured OpenSTLinux (Yocto) system for the Cortex-A7 cores and FreeRTOS on the Cortex-M4. Customers receive a ready-to-use Yocto meta-layer tailored for this SOM, providing:
  - BSP integration for STM32MP157 and the GreenPHY subsystem
  - Pre-set kernel, U-Boot, and device-tree configuration for EVSE peripherals
  - Built-in support for CP/PP, CAN-FD, PLC, ADC/Timers, and related interfaces
  - Example services and reference code for EVSE communication workflows
  - OpenAMP/RPMsg enabled for A7↔M4 interaction

This layer gives developers a rich, EVSE-focused starting point, reducing bring-up time and accelerating application development.

## Other Services

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- Beyond the base platform, we provide turnkey development services, including ISO 15118-20 implementation, integration support, and custom hardware and software engineering for tailored EV charging solutions.

**KameCore** • Powering the Future of EV Charging • [www.kamecore.com](http://www.kamecore.com)

For sales and support inquiries, please contact [info@mail.kamecore.com](mailto:info@mail.kamecore.com)