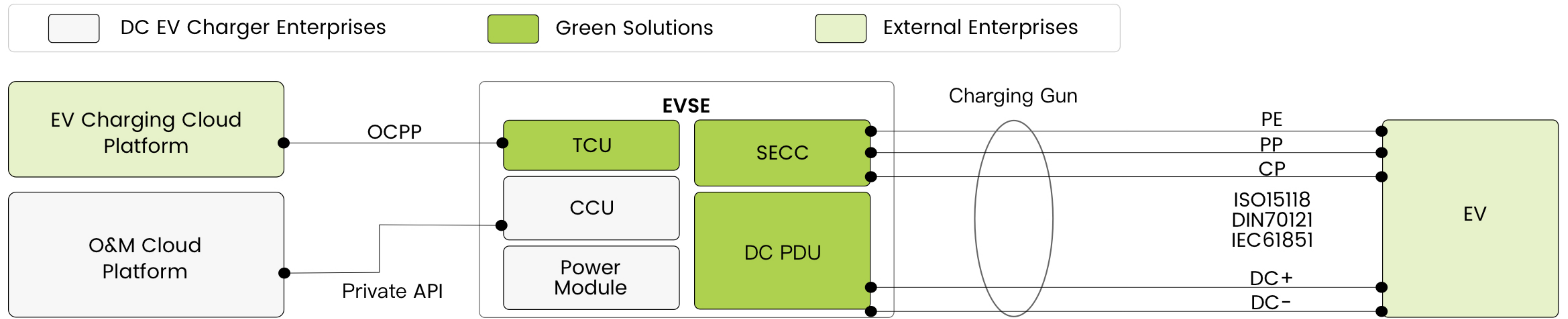


Green Solutions EV Charging Communication Solution

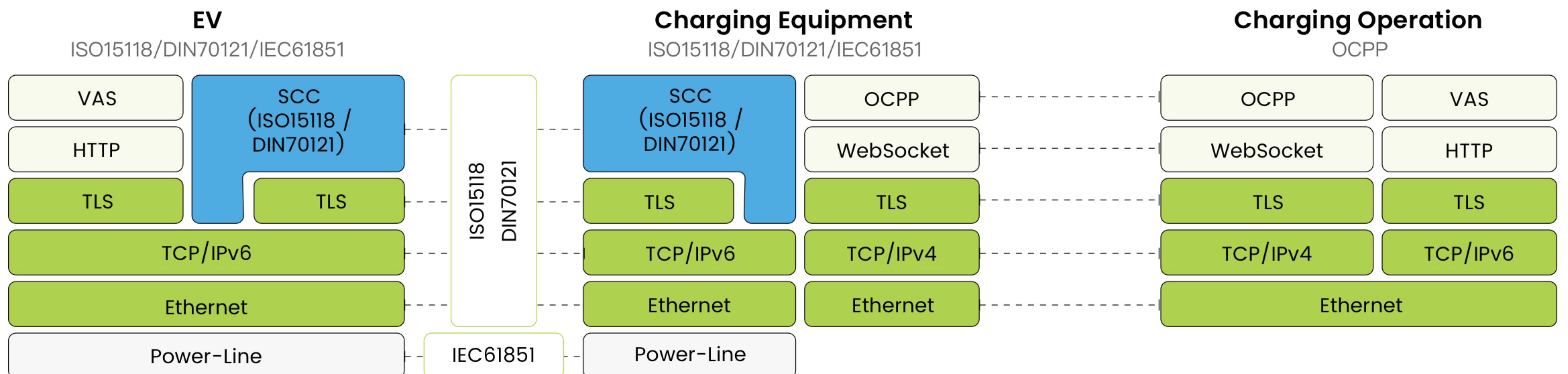
We develop: **SECC** **TCU** **DC PDU**

- Accelerates the development of DC EV chargers by simplifying the interpretation of standards such as DIN70121, ISO15118 and IEC61851.
- Clarifies the development interface for enterprises, allowing them to focus on core charging business such as power module control, overall environmental control, human-machine interaction, and equipment maintenance.
- Reduces the technical interface complexity between SECC and TCU.
- Enhances standard compliance, with SECC as a single component controlling most of the EV interactions according to ISO15118 and IEC61851.



Compatibility and Protocols:

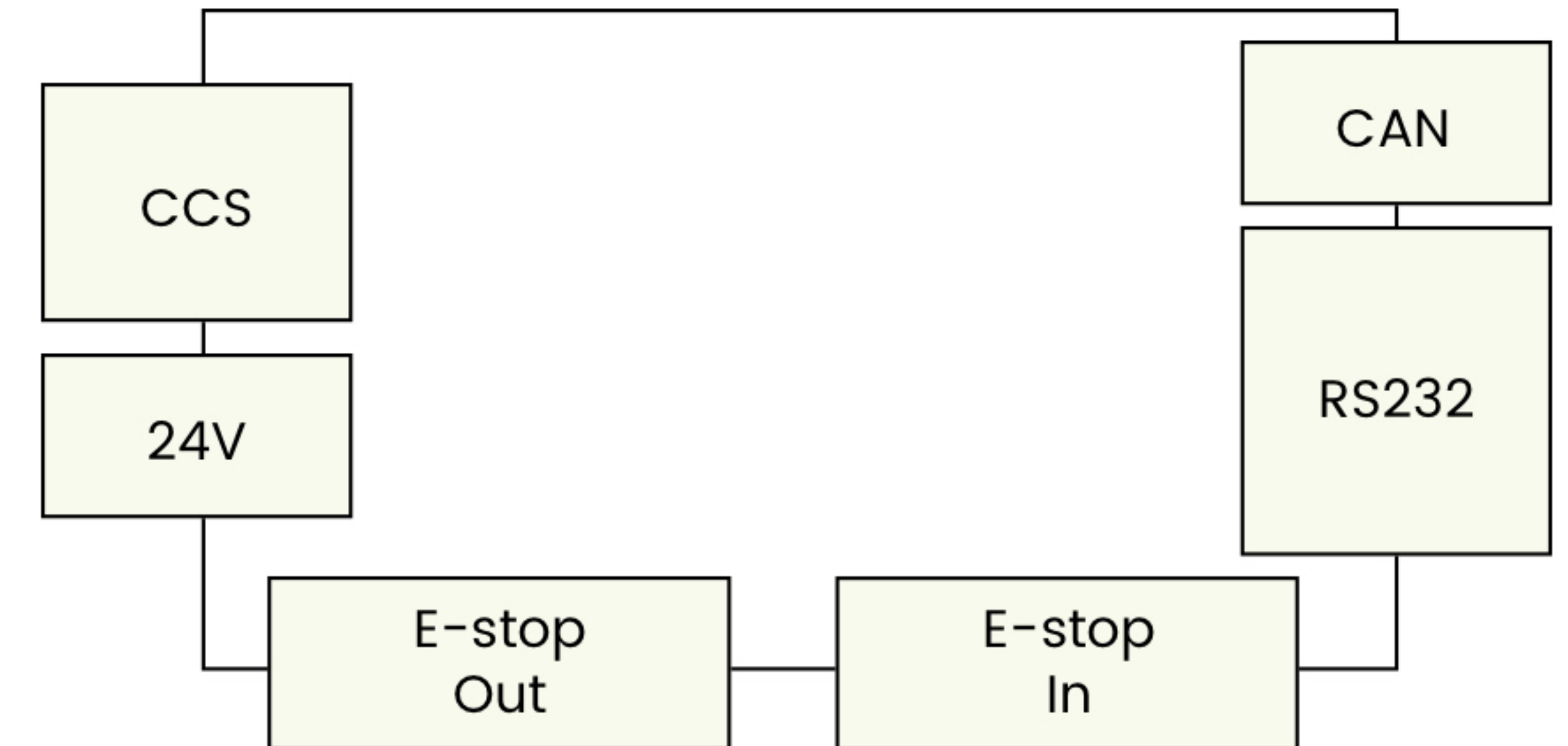
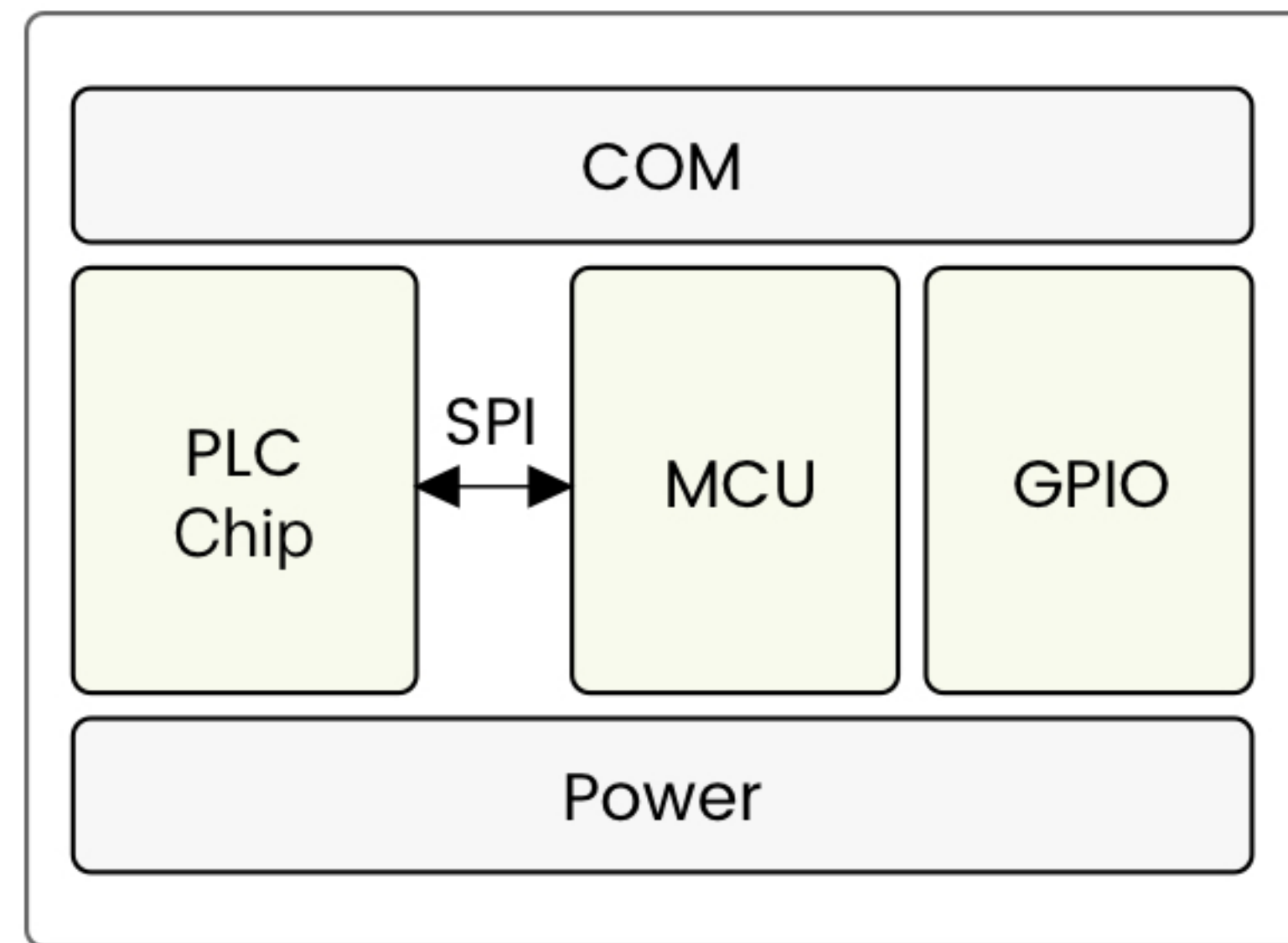
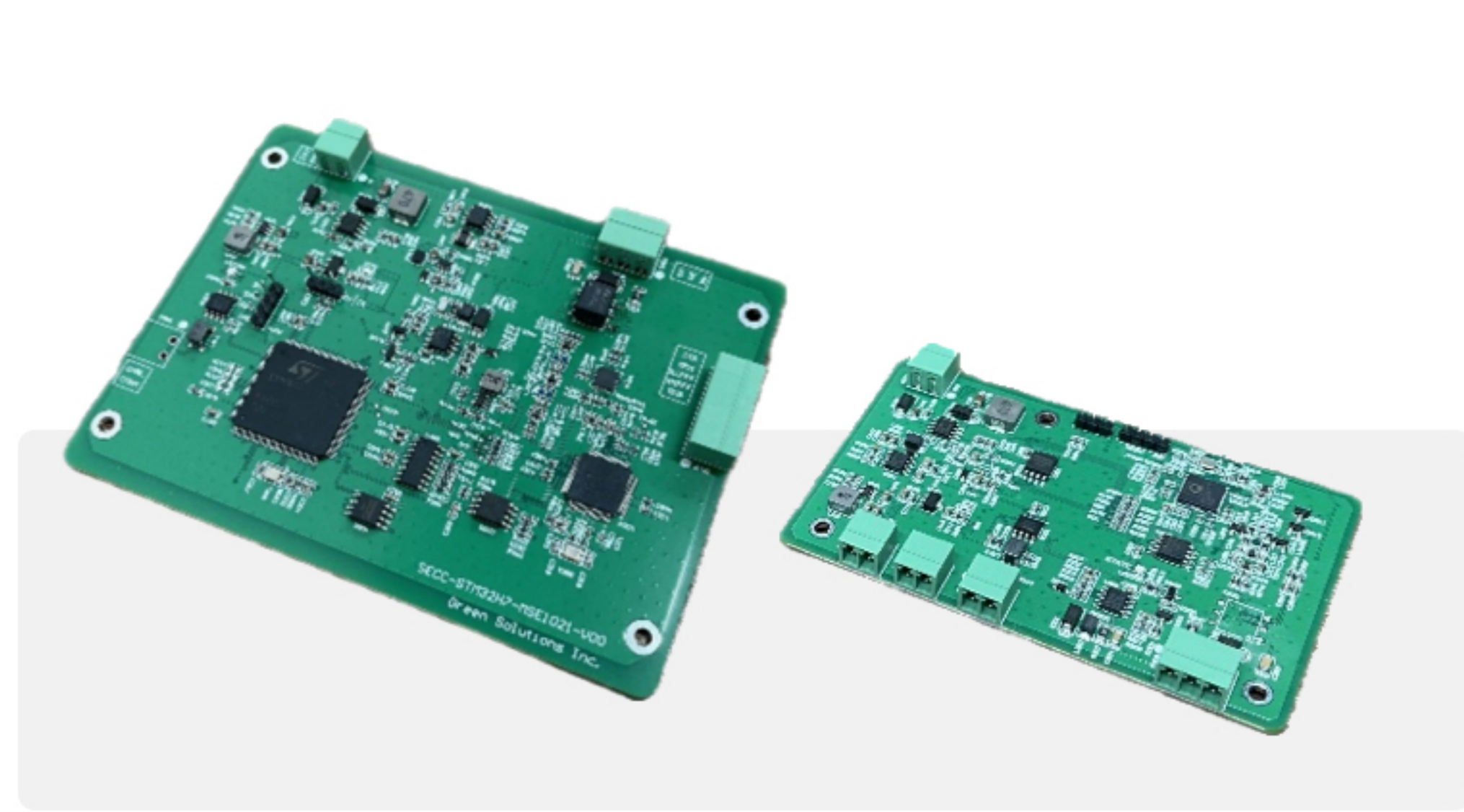
Compatible with ISO15118, DIN 70121, IEC61851, CHAdeMO 2.0 series protocols.



Standards	Protocols
ISO15118-1:2019	Vehicle-to-Grid Communication Interface –Part 1:General information and use-case definition
ISO15118-2:2014	Vehicle-to-Grid Communication Interface –Part 2:Network and application protocol requirements
ISO15118-3:2015	Vehicle-to-Grid Communication Interface –Part 3:Physical and data link layer requirements
ISO15118-4:2018	Vehicle-to-Grid Communication Interface –Part 4:Network and application protocol conformance test
ISO15118-5:2018	Vehicle-to-Grid Communication Interface –Part 5:Physical and data link layer conformance test
ISO15118-10:2022	Vehicle-to-Grid Communication Interface –Part 9:Physical and data link layer requirements for single-pair Ethernet
ISO15118-20:2022	Vehicle-to-Grid Communication Interface –Part 20:2nd generation network layer and application layer requirements
DIN SPEC 70121:2014	Electromobility - Digital communication between a d.c. EV charging station and an electric vehicle for control of d.c. charging in the Combined Charging System
IEC61851-1	Electric vehicle conductive charging system – Part 1: General requirements
IEC61851-23:2023	Electric vehicle conductive charging system – Part 23: DC electric vehicle charging station
IEC61851-24:2014	Electric vehicle conductive charging system – Part 24: Digital communication between a d.c. EV charging station and an electric vehicle for control of d.c. charging
CHAdeMO-2.0	Technical Specifications of Quick Charger for Electric Vehicles

GS-SECC-D122

A lightweight PLC protocol converter that supports European and American CCS charging protocols.



Features:

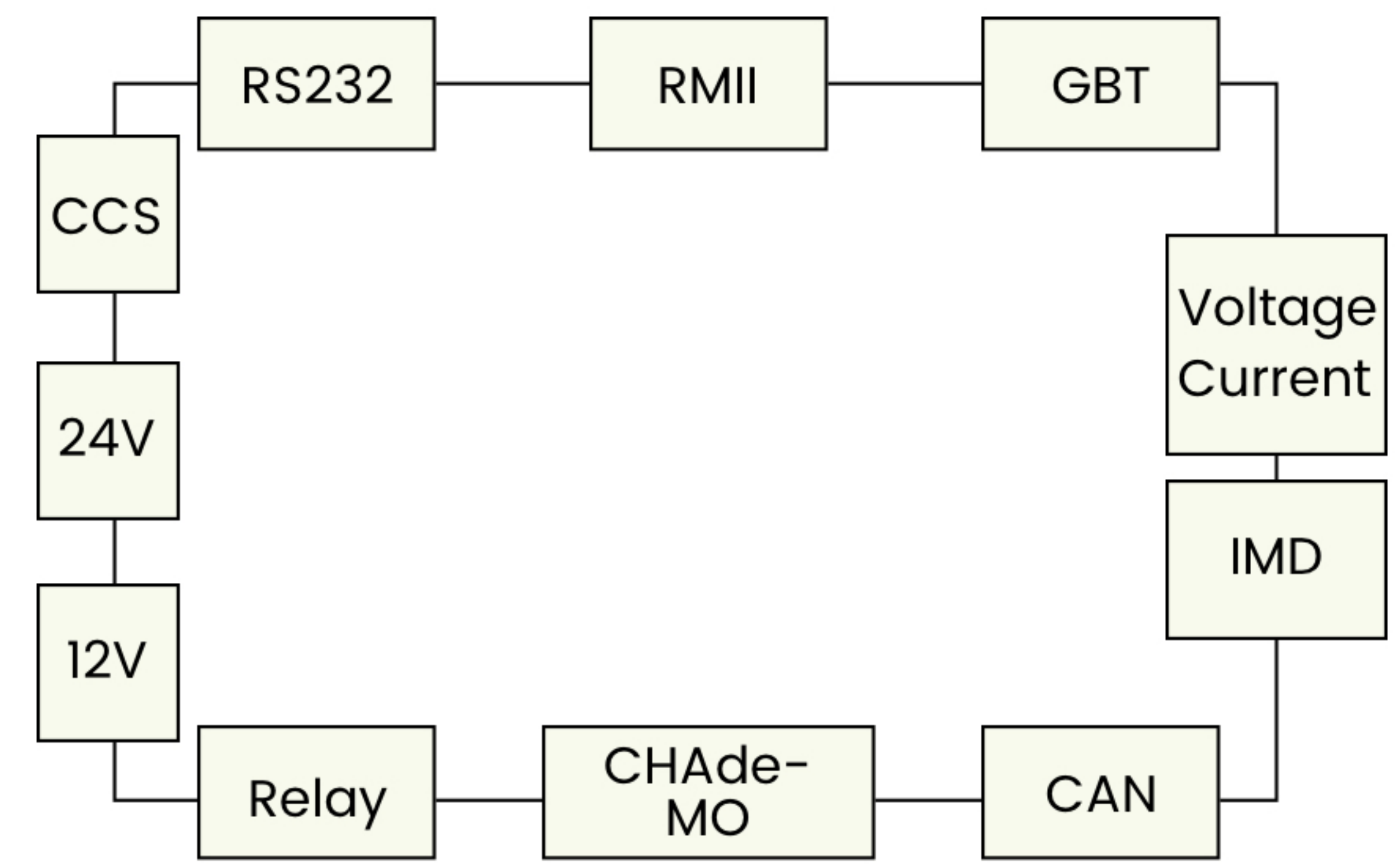
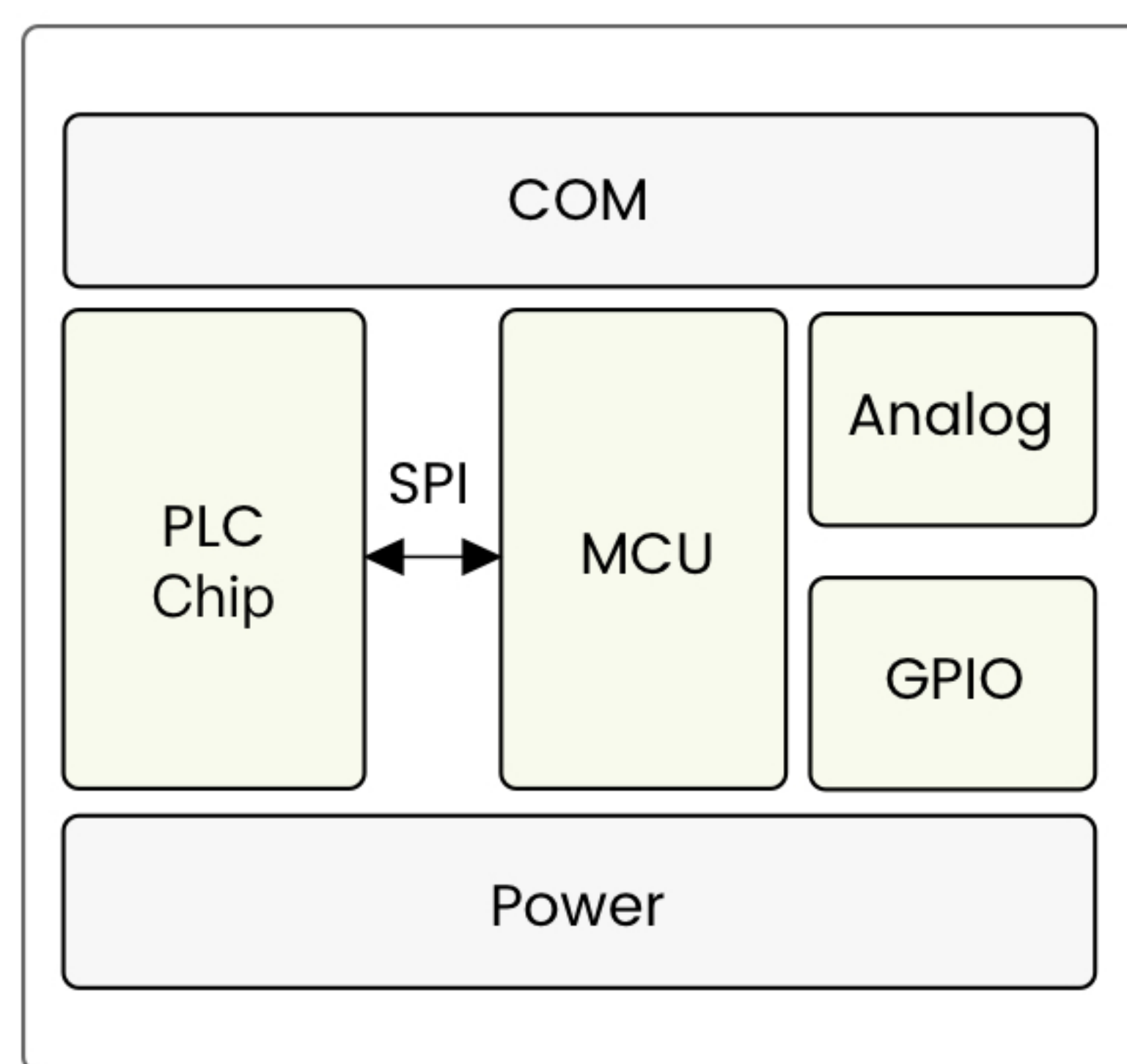
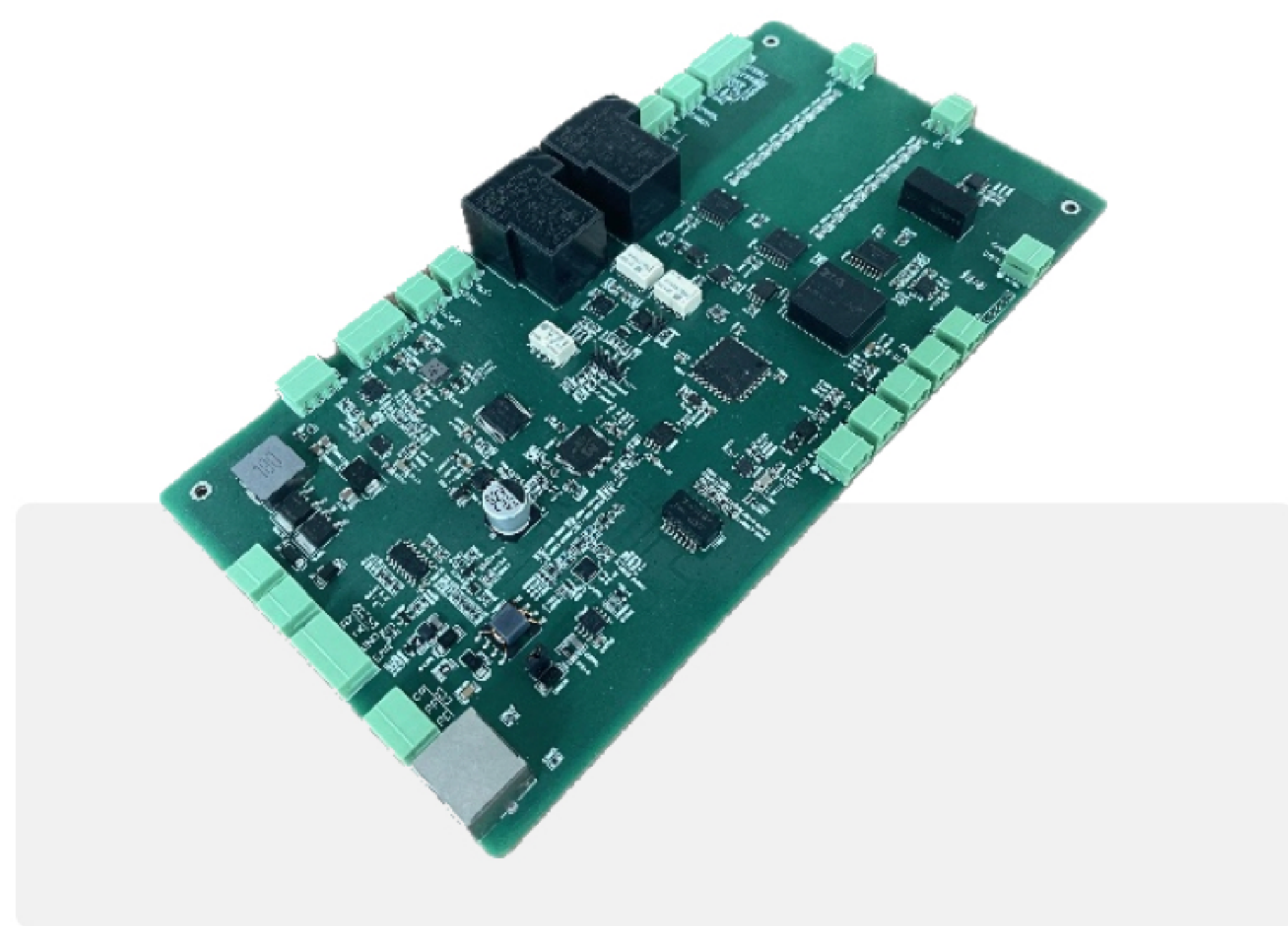
- Small dimensions facilitate the integration into various power DC chargers.
- High-Performance STM H7 Microcontroller, meets network security TLS protocol requirements for transactions.
- Supports PnC and EIM Payment Communication.
- Supports CCS Communication protocol (compatible with DIN 70121 and ISO 15118 standards).
- Supports PWM Communication at 1kHz.
- Supports Emergency Stop.
- Supports RS232 Private Protocol.
- Supports CAN Communication (backup).
- Supports RS232 Serial Port Upgrade.

Technical Specifications

Charging Standards	CCS
Power Supply	Typical supply voltage 12/24VDC
	Input voltage range 9~26VDC
Power	<2W
Dimension	120*90mm/100*50mm
External Communication Ports	CAN, RS232
Operating Temperature Range	-40~85 °C

GS-SECC-CCS-CH-GBT-IMD

A full-featured PLC to CAN protocol converter that supports CCS and CHAdeMO (optional) protocols, and offers main circuit relay control, as well as safety features like insulation detection.



Features:

- Supports CCS and CHAdeMO (optional) communication protocols.
- CCS is compatible with DIN70121 and ISO15118 standards.
- CHAdeMO supports 2.0 technical standards (optional).
- Supports IEC61851-2:2023 charging interface control standard.
- Multi-channel external relay control (optional).
- Insulation detection and ground protection monitoring.
- Local CAN communication and remote upgrade.
- Local support for RS232 diagnostics, debugging, and upgrading.
- Supports all standard Proxima Detection (PD) detection.
- Supports EIM, PnC payment protocols.

Technical Specifications

Charging Standards	CCS, CHAdeMo 2.0
Power Supply	Typical supply voltage 12/24VDC
	Input voltage range 9~26VDC
Power	<2W for CCS, Max.40W for CHAdeMO
Dimension	119*229mm
External Communication Ports	CAN, RS232
Operating Temperature Range	-40~85 °C