SiC INVERTER
STARTER BUNDLE

CISSOID
POWER SEMICONDUCTORS
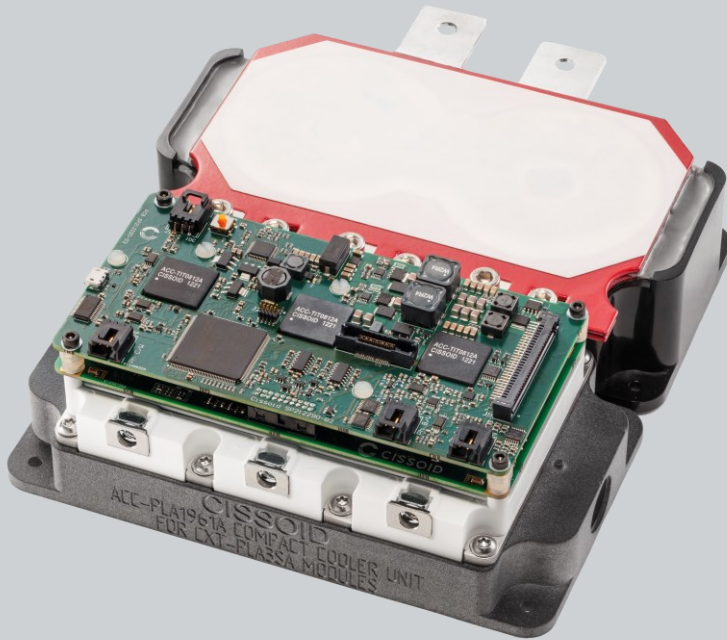

CISSOID's SiC Inverter Starter Bundle consists of all the major hardware and software elements needed to make testing and evaluating our SiC Inverter Platform as easy as possible.

This bundle is available as separate ordering references, as there are many choices of power rating for the switching module and values of the DC-link capacitor. The bundle offers an opportunity to find all the related parts at one glance.

The **SiC Inverter Platform** is built up by the careful design of several components.

The basis is the **SiC Intelligent Power Module (IPM)**, which combines the power module itself and the gate driver board.

The power module is a 3-phase half-bridge configuration of low R_{DSON} Silicon Carbide (SiC) MOSFETs, while the **gate driver board** is built up around CISSOID's HADES2 gate driver chipset.

The heart of the platform is the **SiC Inverter Control Module (ICM)**. This module adds the processor board to the stack of the power module plus the gate driver board (IPM), based on Silicon Mobility's OLEA® T222 Field Programmable Control Unit.

To make the hardware complete, a custom designed, low ESL DC-link capacitor is available, as well as a 3D-printed liquid cooler.

To this hardware stack, Silicon Mobility's OLEA® APP INVERTER software can be added to make a complete **e-motor traction inverter**.

Key features

- 3-Phase 1200V/340-550A SiC IPM

- 3-Phase protected Gate Driver Board (Ta +125°C)

- SiC Inverter Control Board (OLEA® T222 FPCU based)

- OLEA® APP INVERTER software

- Low ESL DC-link capacitor (500-900V/500-135μF)

- 3D-printed liquid cooler (PA12 material, up 70°C liquid temp.)

- OLEA® T222 processor & software: ISO26262 ASIL-D and AUTOSAR 4.3 certified

- Inverter Control Module: Designed for ISO-26262 ASIL-D (certification ongoing)

Ordering Information

Reference	Description
CXT-PLA11xx	SiC Inverter Control Module
CXT-PLA3Sx12xxx	SiC Intelligent Power Module
Through distributor	Low ESL DC-link capacitor
ACC-PLA10xxx	3D-printed liquid cooler
LIC-OLEA-APP	OLEA® APP INVERTER software

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