



5-IN-1 BATTERY CONTROLLER INTRODUCTION

PRODUCT PROFILE

- Highly integrated 5-in-1: VCU,MCU,DCDC1,DCDC2 and PDU, compatible with CAN2.0/CANFD;
- The structure adopts an upper and lower compartment layout, which reduces operational crosstalk between modules and achieves excellent EMC performance.
- The three-dimensional water channel design enables power modules to share a cooling water channel, which reduces heat loss and improves conversion efficiency.
- The IGBT adopts PIN-FIN cooling, which reduces the module's thermal resistance and improves efficiency.

ADVANTAGES

- High Integration Level: Highly integrates the functions of VCU, MCU, DCDC1, DCDC2 and PDU.
- Excellent EMC Performance: Adopts upper and lower compartment layout.
- Good Heat Dissipation Performance: Features an innovative three-dimensional water channel design, and the IGBT adopts PIN-FIN cooling. High Efficiency (Max): DCDC1 ≥ 95%, DCDC2 ≥ 95%, MCU ≥ 98%.
- Modular Design: Different functional modules can be combined arbitrarily.

SPECIFICATION

ITEM	PARAMETER	ITEM	PARAMETER
Rated voltage (V)	350 (240~400)	DCDC2 max efficiency	≥95%
DCDC1 output power (kW)	3	MCU rated output power	30kVA
DCDC1 output voltage (V)	16 <i>∼</i> 32	MCU max control efficiency	≥98%
DCDC1 max efficiency	≥95%	MCU peak power	60kVA
DCDC2 output power (kW)	2	Cooling type	Liquid cooling
DCDC2 output voltage (V)	6∼18	Weight (kg) /Dimension (mm)	20/453*317*190

DRIVING MOTOR CONTROLLER INTRODUCTION





PRODUCT PROFILE

- The third-generation solution is built based on the ERDU series controller products of the new energy commercial vehicle motor controller platform, which is suitable for 3.5T-4.5T new energy vehicle models.
- Wide product coverage: It can meet the needs of 3.5T micro trucks, pickup trucks and 4.5T light trucks, etc.
- High power density: It can be designed integrally with the motor, featuring small size and light weight.
- High EMC level: It meets Class 3 under load and has excellent anti-interference performance.

ADVANTAGES

- Strong compatibility: Compatible with 12V/24V solutions, with power expandable to 110kW compressor.
- Safe and reliable: Developed based on mass application platforms.
- High localization rate: Fully localized design except for the MCU chip and has advantages in cost and fast response

SPECIFICATION

ITEM	PARAMETER	ITEM	PARAMETER
Input voltage range	240V~480V	Max volume	3L
Rated voltage	350V	Cooling flow rate	10L/min
Peak power	90kW	Cooling type	Liquid cooling
EMC class	Class 3	Max weight	4.85kg
EMC class	98%		

BDC INTRODUCTION TO THE BODY PRE-CONTROL PROJECT





PRODUCT PROFILE

- An all-in-one domain controller integrating functions such as BCM, PEPS, GW, TPMS, TMS and VCU;
- Developed based on the principles of hardware modularization and software platformization;
- Realizes the integration of functions and components, conducts centralized control and unified management of various body electrical appliances/actuators;
- Performs unified analysis and processing of collected information; and allocates system resources in a reasonable and effective manner.

ADVANTAGES

- Platform-based design: With modular circuits and platform-based software, it can quickly adapt to the needs of different customers.
- Low cost: Simplifies the vehicle network topology, reduces the weight of wire harnesses, and gives the vehicle a cost advantage.
- Rich resources: Supports various input types such as analog quantity, digital quantity, frequency input, etc.; and supports various output types such as high-side, low-side, half-bridge, full-bridge drive, etc.

SPECIFICATION

ITEM	PARAMETER	ITEM	PARAMETER
Operation voltage	9V∼16V	High-side output	32
Quiescent Current	< 5mA	H-Bridge output circuit	22
LF Antenna	6	CAN/CANFD	12
Analog Input	67	LIN	9
Digital Input	85		The main chip is equipped with
High-side output	49	Cyber security	HSM, which meets information
Function safety	ASIL B		security requirements