



FARADAY DEVELOPMENT CENTER

BMS and electronic modules for traction batteries and energy storage systems

WHO WE WORK FOR

Battery system manufacturers

Traction battery manufacturers

Management systems, indication, telemetry, integration with chargers and vehicles.

“We need a 48 V BMS with CAN and support for our charger.”

OEM manufacturers of special vehicles

Scrubber dryers, electric carts, robots, forklifts, golf carts, electric boats and other traction vehicles.

“We need the battery module adapted to our vehicle and communication protocol.”

Energy storage integrators

Control, monitoring, CAN / RS-485 / Ethernet, remote diagnostics and data collection.

“We need battery monitoring, an alarm log and data transfer to the cloud.”

Design bureaus and startups

Contract development of circuits, PCBs, embedded and application software, prototyping and series support.

“We have a specification for an electronic module and need a contractor from schematic to batch.”

ABOUT THE COMPANY

What we do

We build management systems for lithium-ion batteries, telemetry and industrial electronics for traction batteries, energy storage systems and related solutions. We work through the full cycle: we refine the specification, design circuits and PCBs, write embedded and application software, build samples, run tests and prepare products for series production.

5

years on the market

30+

completed projects

15+

years of experience

Full cycle

from spec to series

HOW WE WORK

Three scenarios for your project

Off-the-shelf products

BMS management systems, indicators, current sensors and telemetry for lithium-ion battery systems.

THE CUSTOMER GETS

Electronic modules from stock, product selection and integration support.

Product customization

We adapt off-the-shelf modules to your voltage, enclosure, interfaces, logic, protocols and operating conditions.

THE CUSTOMER GETS

A module with the agreed changes and documentation.

Contract development

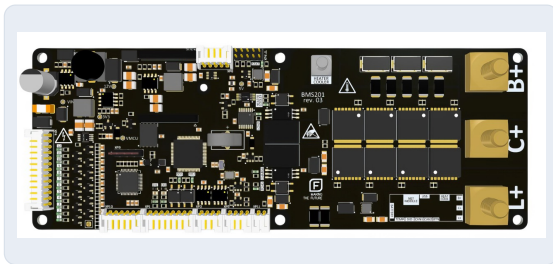
We develop electronics: schematics, PCBs, embedded and application software, prototypes, testing and preparation for series production.

THE CUSTOMER GETS

A prototype or production unit with documentation and support.

OFF-THE-SHELF PRODUCTS

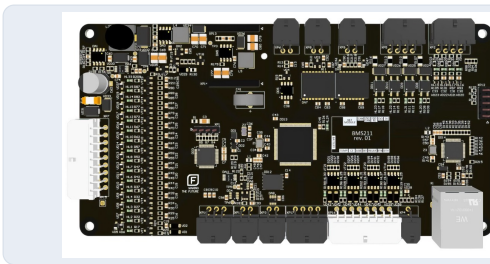
Modules for battery systems



BMS · SINGLE-BOARD

BMS201

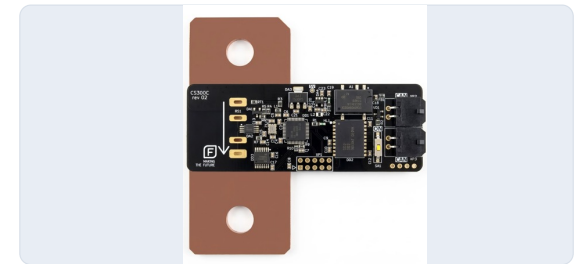
An all-in-one single-board BMS with 100 A MOSFET contactors and a high-precision measurement path for 24–36 V batteries with a capacity of up to 200 Ah. BMS states and control commands can be sent and received over CAN, USB or wireless interfaces.



BMS · CENTRALIZED

BMS211

A full-featured, highly integrated centralized battery management system with high measurement accuracy and advanced algorithms for batteries with a voltage of 24–80 V.

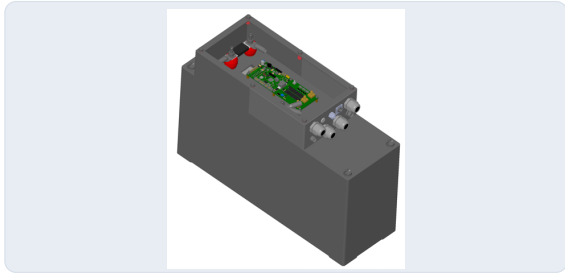


CURRENT SENSOR

CS300C

A shunt-based current sensor module for battery systems and other applications. The CS300C measures the shunt signal with a 24-bit analog-to-digital converter. The module automatically compensates for changes in shunt resistance with temperature.

Completed projects



LOGISTICS · SUPPLY OF OFF-THE-SHELF MODULES

24 V / 206 Ah module

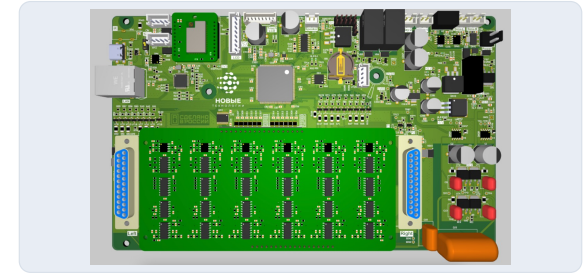
Lithium-ion battery pack for electric carts.



MEDICINE · CONTRACT DEVELOPMENT

8-channel fluorimeter

An instrument for measuring the concentration of DNA, RNA and proteins in samples by fluorescence.



SECURITY · CONTRACT DEVELOPMENT

Walk-through metal detector

The system is designed for multi-zone metal detection with classification by metal type.

Technologies and tools

Circuit design and PCB

Altium Designer

LTspice

Gerber

BOM

DFM

EMC

IPC

Embedded software

C

Assembler

STM32

ESP32

RTOS

Bare-metal

Bootloader

OTA

Embedded Linux

Buildroot

Device tree

BSP

Rockchip

Allwinner

systemd

Application software

Electron.js

Go

Python

C#

USB

Windows / Linux / macOS

Web and backend

React

Go

Python

REST API

PostgreSQL

Docker

MQTT

Interfaces and communication

CAN 2.0B

J1939

CANopen

RS-485

LoRa

ZigBee

Wi-Fi

Ethernet



Contacts

PHONE

+7 499 130-42-11

EMAIL

info@faradaydc.com

WEBSITE

faradaydc.ru/en

Faraday Development Center LLC ·
Moscow, Russia

TIN 9723111100