

# Portoflio of CCS (Cell Contacting System)

Mass  
produced  
&  
Under  
development  
products

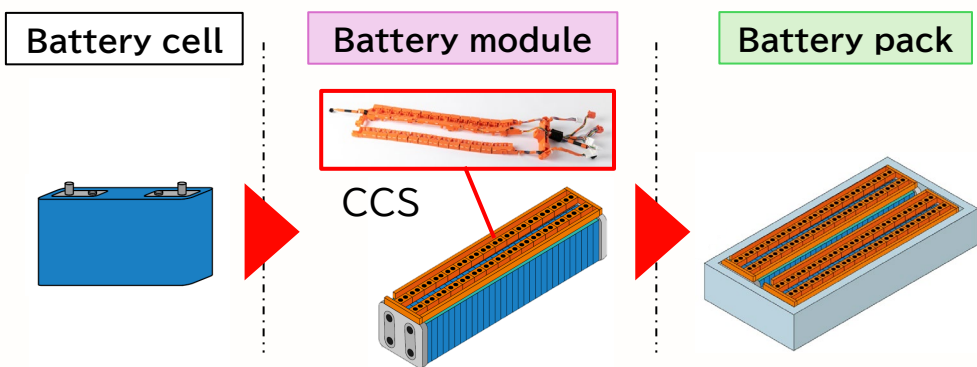
- Electrically connects battery cells and modularizes the battery
- Detects battery cell voltage and temperature, and protects detector wires with FUSE

## Background or Challenges

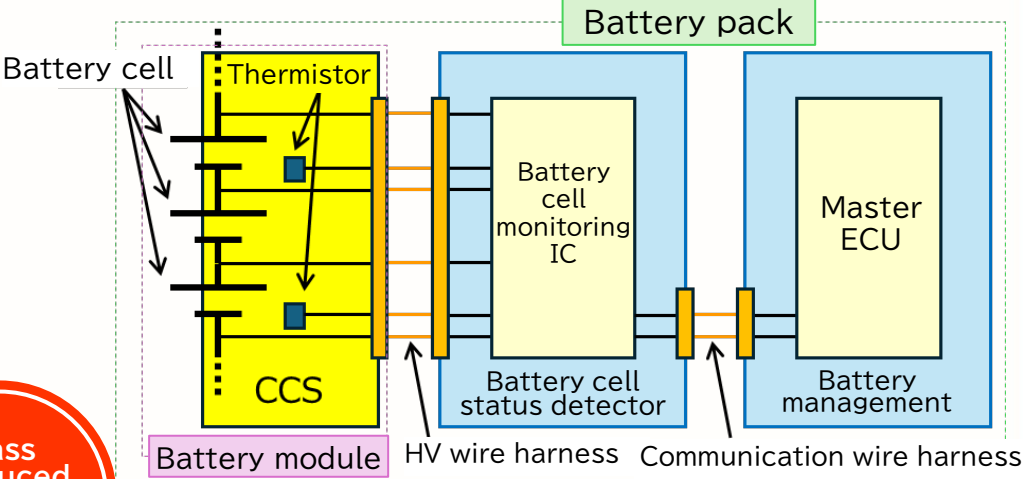
Provides low height and light CCS for battery modules in EVs with increasing capacities and densities

## Solutions to Challenges or Features

### • CCS(Cell Contacting System)



### [Battery system block diagram]



### <Wire type>

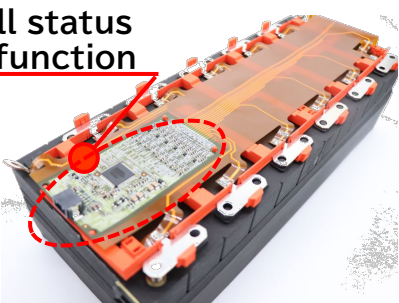


Electrification products based on our accumulated technologies

- High flexibility in wire routing
- Easily absorbs excess length

### < FPC type with battery cell detection function >

Battery cell status detection function



Battery cell voltage and temperature detection circuit mounted on FPC

- Saves space by integrating functions
- Reduces routing area by reducing HV wire harnesses

Mass  
produced  
since  
1997

Mass  
produced  
since  
2022

Under  
development  
Available  
in 2028

Under  
developed  
Available  
in 2029

### <FPC type>



Replacement of routing materials with FPC

- Reduces the height of wiring components
- Ensures product quality by using automated production
- Directly mounts fuses and thermistors on FPCs

### <Wireless type>



Wireless module

Turns communication wire harness connection into wireless

- Saves space by eliminating wire harnesses
- Reduces weight
- No need to consider routing paths