


ONLINE PUBLIC DEMONSTRATION

17th November 2020, 10:00-12:00 CET



InteGrated and PHysically Optimised Battery System for Plug-in Vehicles Technologies

 This session is being recorded

1

GHOST

This project has received funding from the European Union's Horizon2020 Programme for research and innovation under grant agreement No.770019.



ONLINE PUBLIC DEMONSTRATION

17th November 2020, 10:00-12:00 CET



Power PCB

Frédéric Meniere



This session is being recorded

2

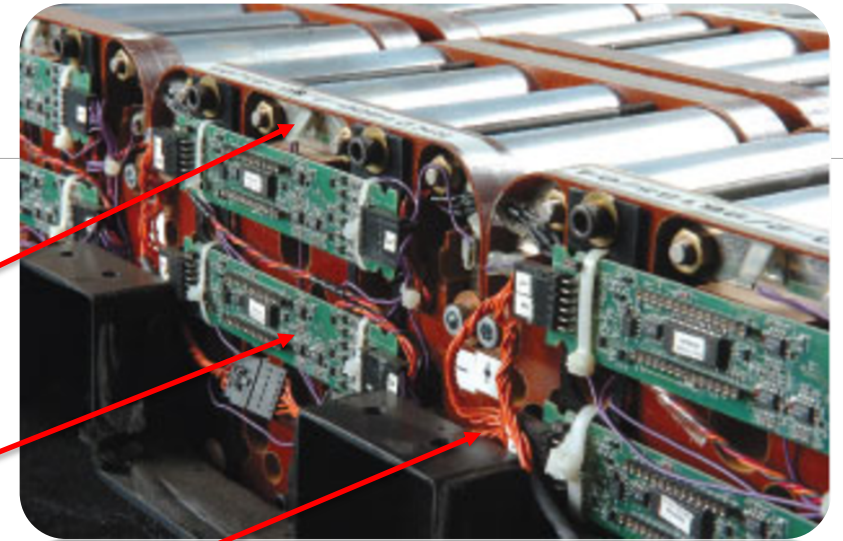
GHOST

ONLINE PUBLIC DEMONSTRATION

17th November 2020

Introduction

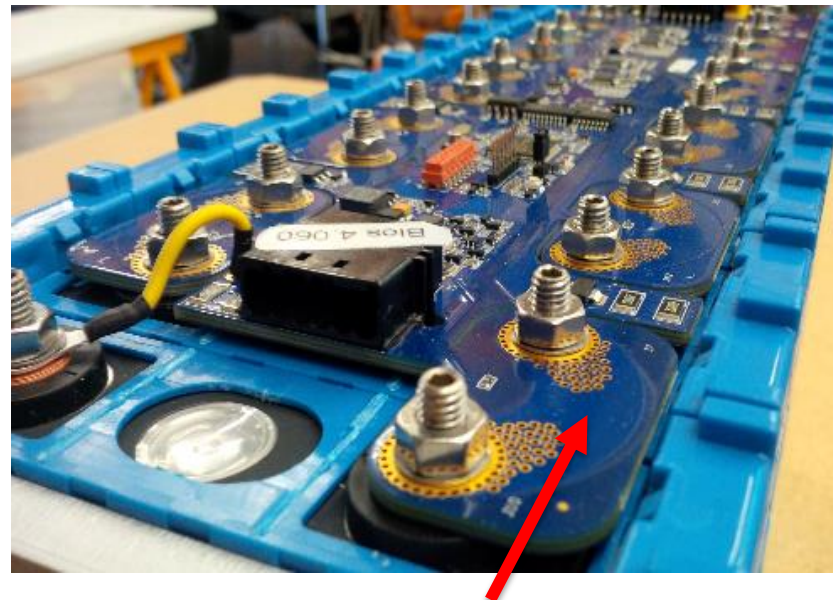
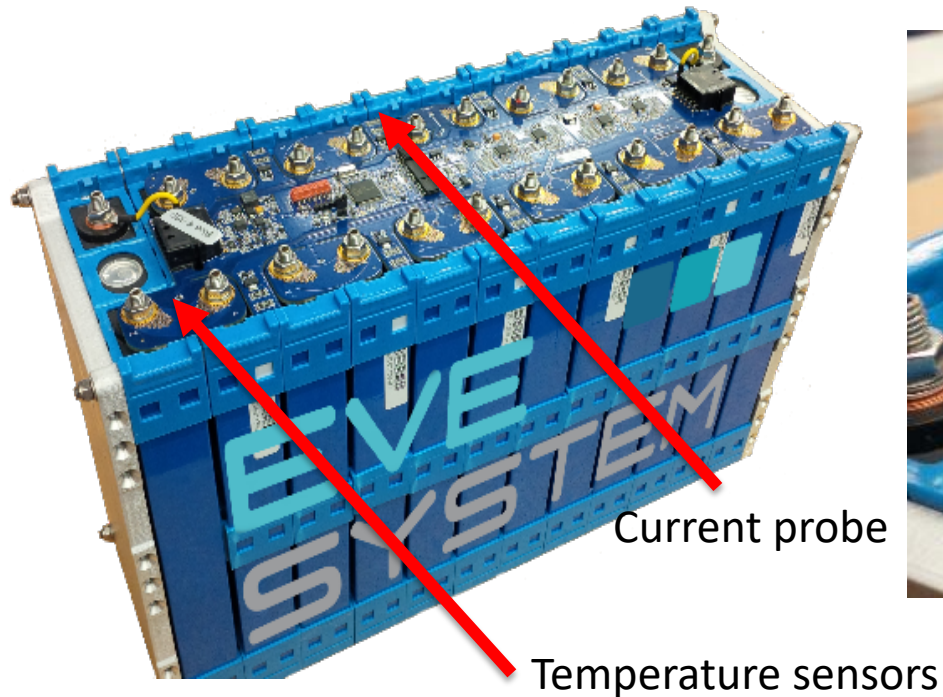
- Battery module is made of :
 - Cells
 - Mechanical support
 - Power tracks between cells
 - BMS
- Conventional modules use busbar and deported BMS with multiples wires (T° & Voltage at least)
- EVE System concept is to merge busbar & BMS in a on-module board
 - Save cost (no need of busbars, BOM & assembly time reduced)
 - Better energy density
 - Some functionalities are only possible with this technology (ex : integrated current sensor)



<https://www.evaluationengineering.com>

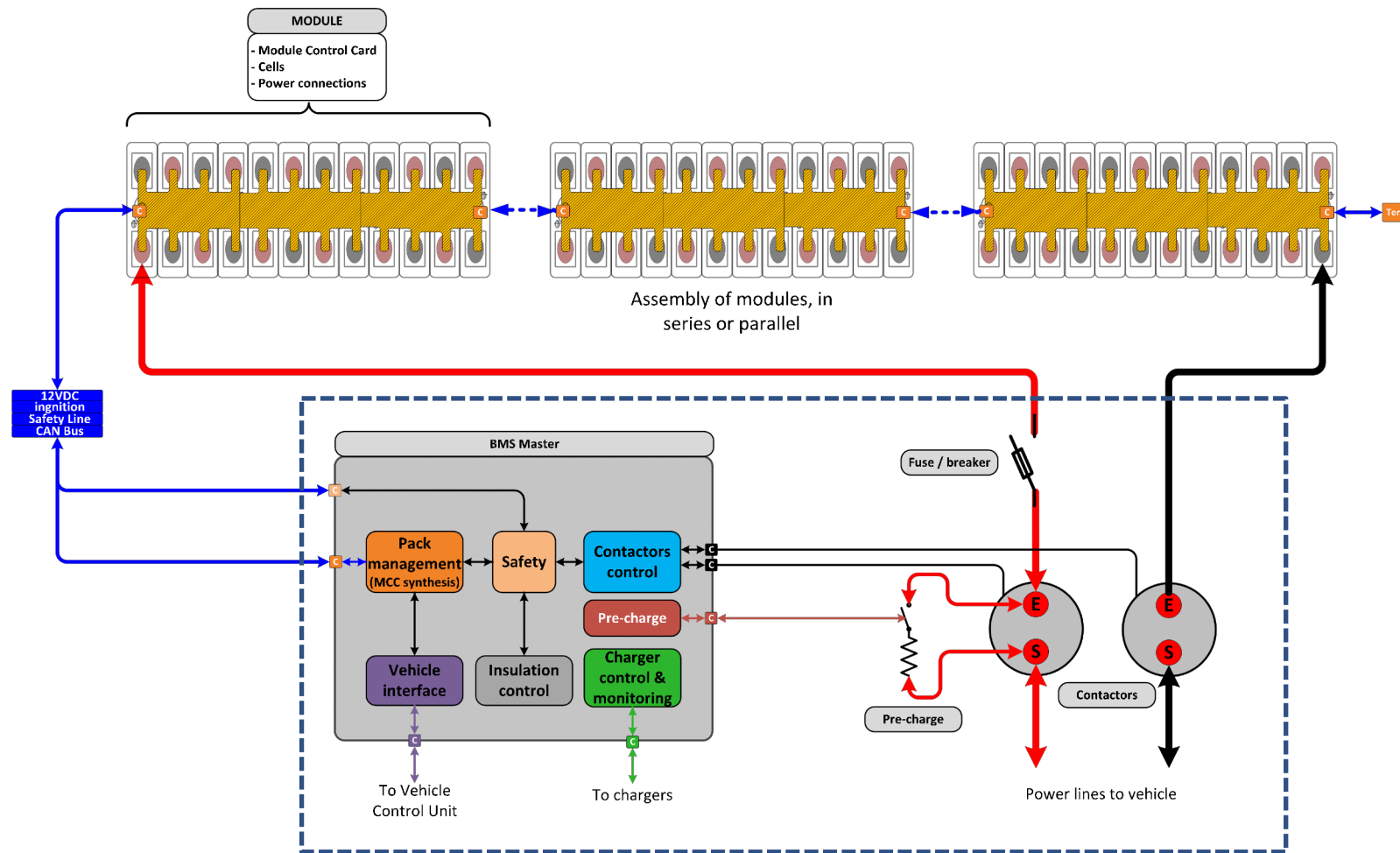
EVE System module concept

- Power PCB example:



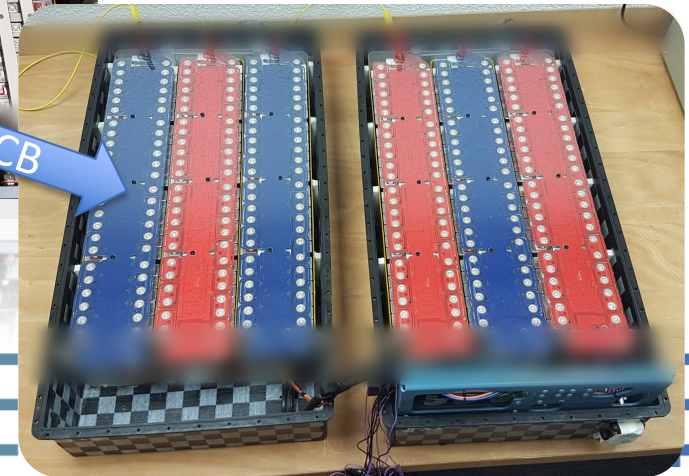
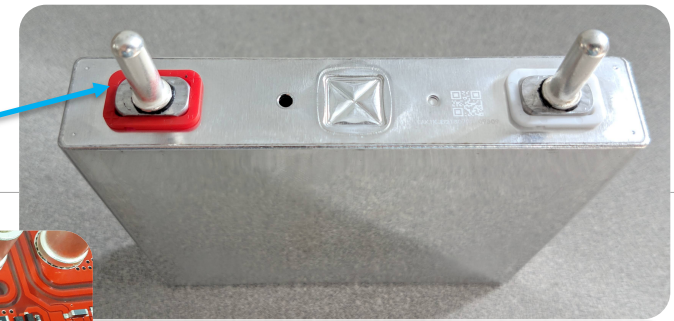
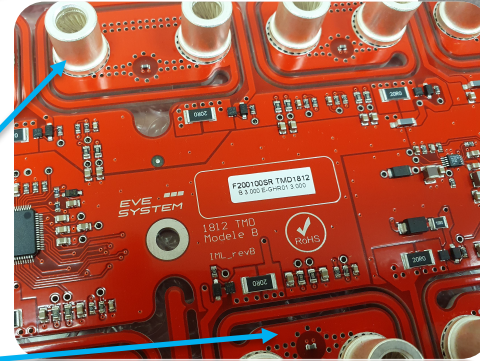
- Very compact design
- “Module” is a complete independent system
 - Production process simplified
 - 2nd life is easier
 - Pack maintenance is easy
- Concept adaptable to many cells

EVE System module concept – Pack architecture

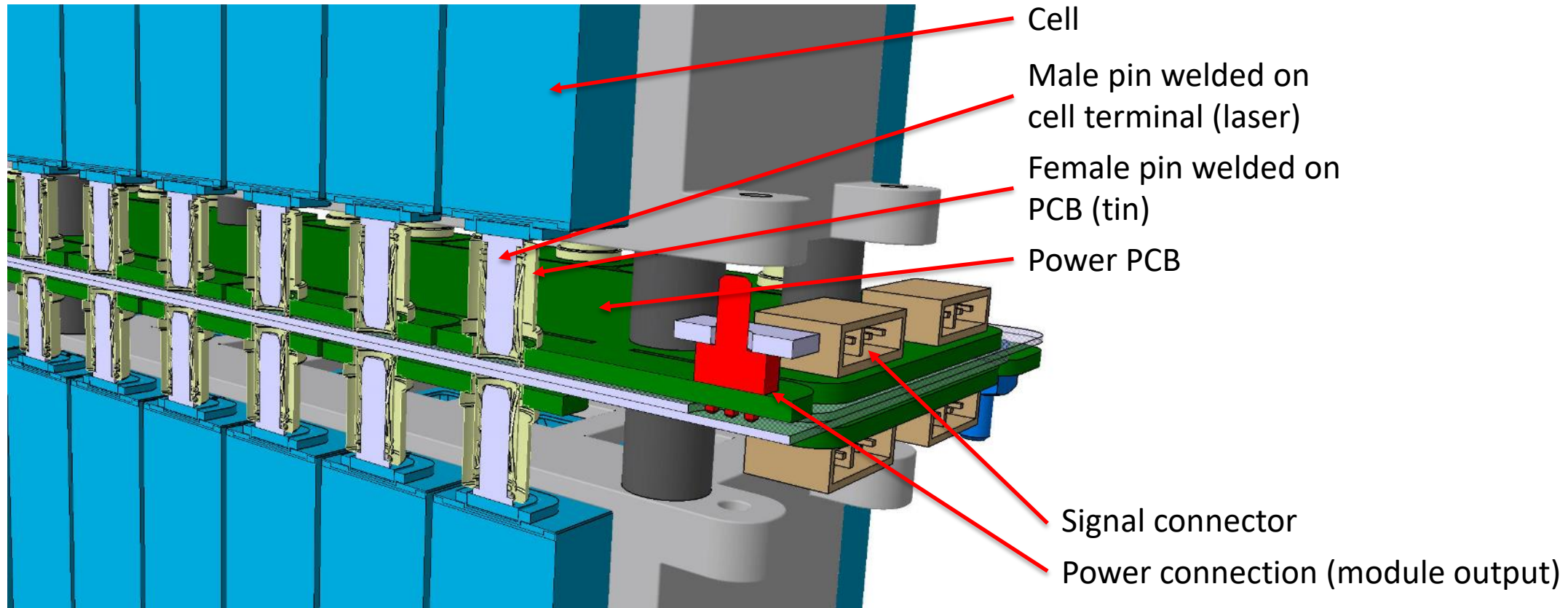


GHOST Power PCB

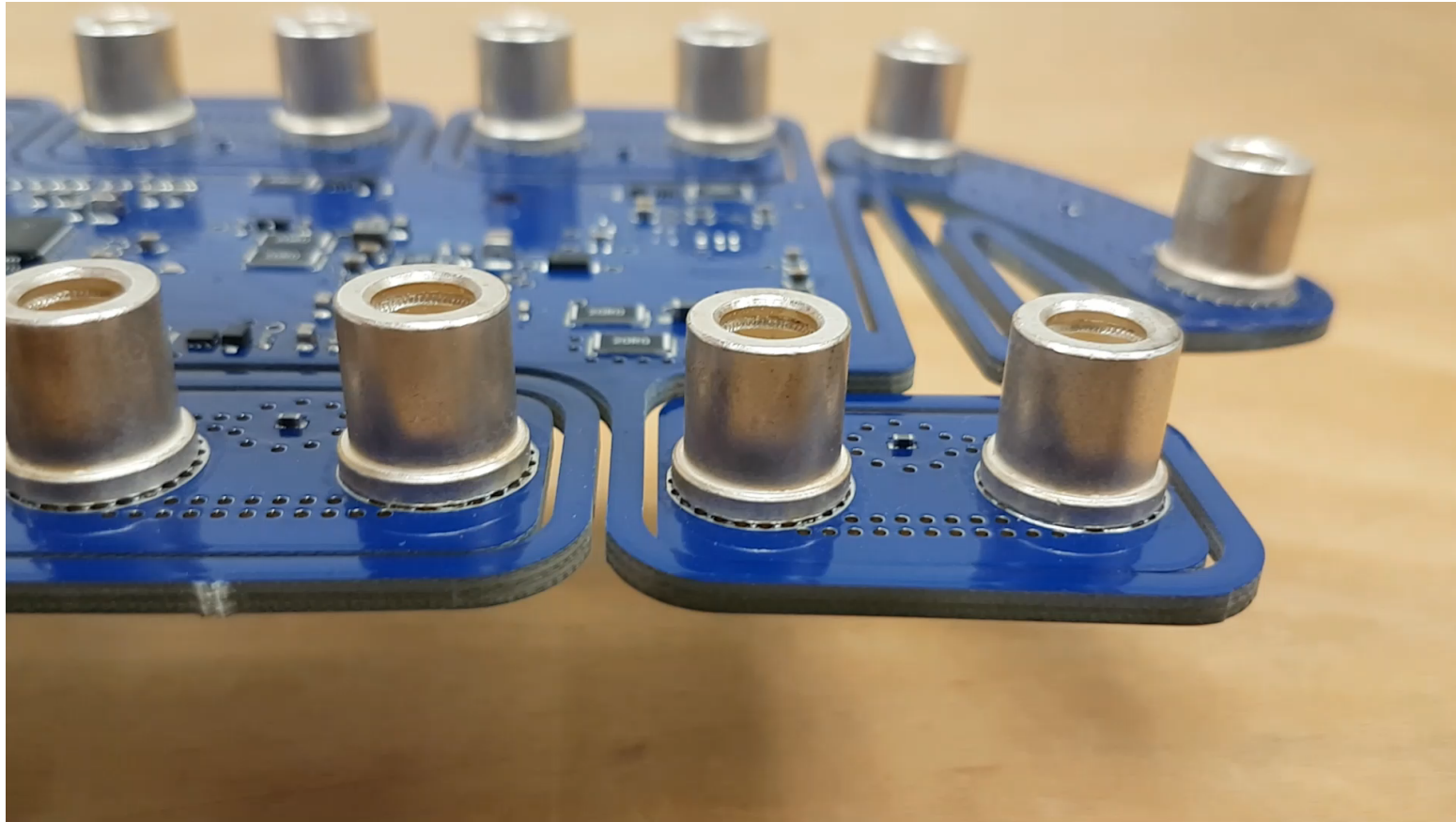
- Cell with male pins laser welded
- Power PCB with female pins tin welded
- Power tracks
- All electronic included on the Power PCB
- => 6 pcs to go from separate cells to fully connected cells (power & monitoring)



GHOST Power PCB



GHOST Power PCB tolerance compensation



Thank you



Copyright ©

The content of this presentation has been produced under the EC contract 770019. It is the property of the GHOST consortium and shall not be distributed or reproduced and/or disclosed, in any form or by any means without formal approval of the GHOST Consortium.

The content of this presentation does not reflect the official opinion of the European Union. Responsibility for the information and views expressed in the presentation lies entirely with the author(s).

GHOST

ONLINE PUBLIC DEMONSTRATION

17th November 2020

Consortium



IVECO

TOYOTA



MOBILITY, LOGISTICS &
AUTOMOTIVE TECHNOLOGY
RESEARCH CENTRE



ikerlan



GHOST

This project has received funding from the European Union's Horizon2020 Programme for research and innovation under grant agreement No.770019.

