

CIRC-UIITS

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*Circular Integration of independent Reverse supply Chains for the smart reUse of IndusTrially relevant Semiconductors

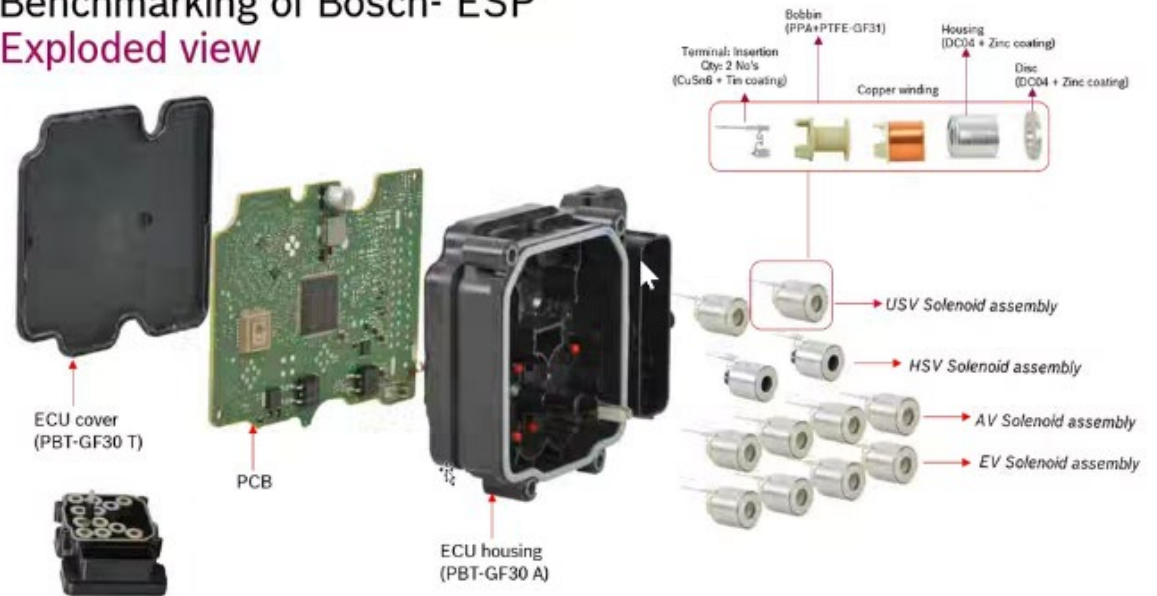


Pilot 1 - ESP[®] Module (electronic stability program)

High impact on the market
ECUs are important in every car independent of its propulsion
70% of cars contain an ESP
Since 25 years almost 300 Million ESP-Systems produced
Relevant for electric and non electric cars
Prevents 80% of accidents

Actual ESP-generation have already a reduced CO2 footprint on the first level by
reducing the weight
optimize power and effectivity
reduce voice and vibration
optimize the energy management in the production process

Benchmarking of Bosch- ESP Exploded view



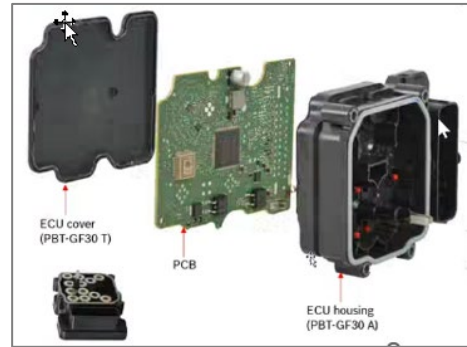
Bosch Pilot Aktivitas 2023



Material and process data
OFFIS and MARAS



Handbook, KPI's



Input and discussion for gaming, BeSu



Alternative materials focus on PCB and solderpaste



Physical recycling



11 Samples send to Erion (1 closed, 9 open and 1 with hydraulic)



Automatic disassembling of chips



9 PCBs send to Polimi

Activities 2024/2025

