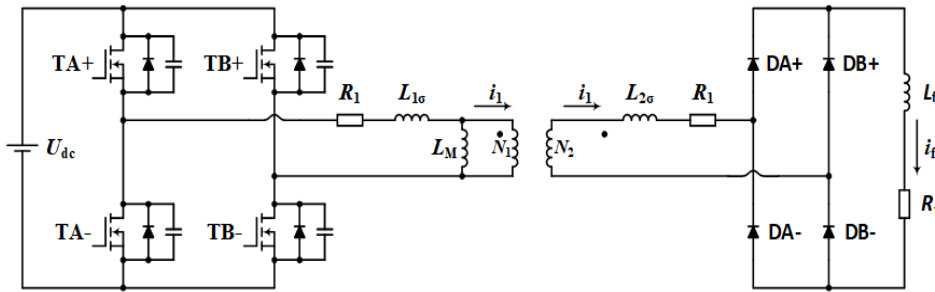
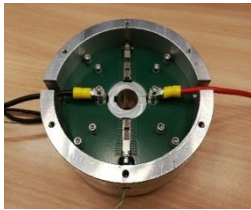


Design and Control of Brushless Excitation for EESMs

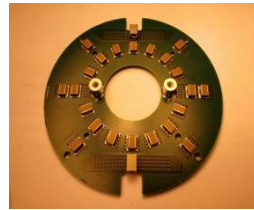
Brushless Excitation System of an EESM



H-Bridge



Rotational
Transformer



Rectifier

- **Project Objective:** To improve the overall performance of brushless system for **EESMs**
- **Project Type:** Research project < 2 years
- **Project Duration:** From 2024-10-01 to 2026-08-31
- **SEC Academic Partner:** Chalmers University of Technology
- **SEC Industrial Partner:** Volvo Technology AB (Volvo GTT), Volvo Cars AB (VCC)
- **SEC Cash Funding:** 1.8 MSEK
- **Project Leader:** Yujing Liu (e-mail: yujing.liu@chalmers.se)
- **Planned Deliveries:** (1) reports on EESM topology study and specifications and rotational transformer design and tests; (2) academic papers about parameter identification; field current estimation; field current dynamic control; and failure detection.