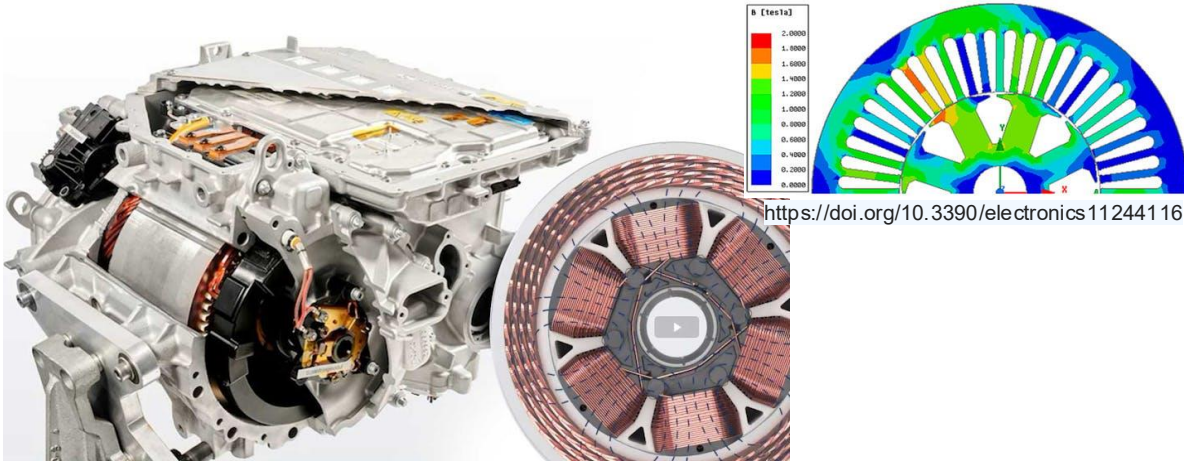


EESM and LCA extension of EPOS powertrain optimization tool



BMW 5th generation EV motor (www.electronicdesign.com)

- Theme 2 researcher project, based on the existing Electric Powertrain Optimization tool EPOS.
- Develop **parametrized EESM models** with respect to performance, losses, thermal behavior, and cost, and integrate it into the EPOS powertrain optimization tool.
- Develop a **sustainability evaluation module** for EESM, PMSM, PMaSynRM, and IM and integrate it into the EPOS powertrain optimization tool.
- Demonstrate the tool through at least **one case-study of interest** optimize a selected set of powertrains with EESM, PMSM, PMaSynRM and IM as traction machines.

Project dates: 2025 02 11 – 2026 03 01

Partners: Lund University, Borgwarner

SEC funding & in-kind: 1 600 000, 300 000 (LU), 400 000 (Borgwarner)