SysEE
Lehrstuhl für Systemtechnik elektrischer Energiespeicher

Research Module

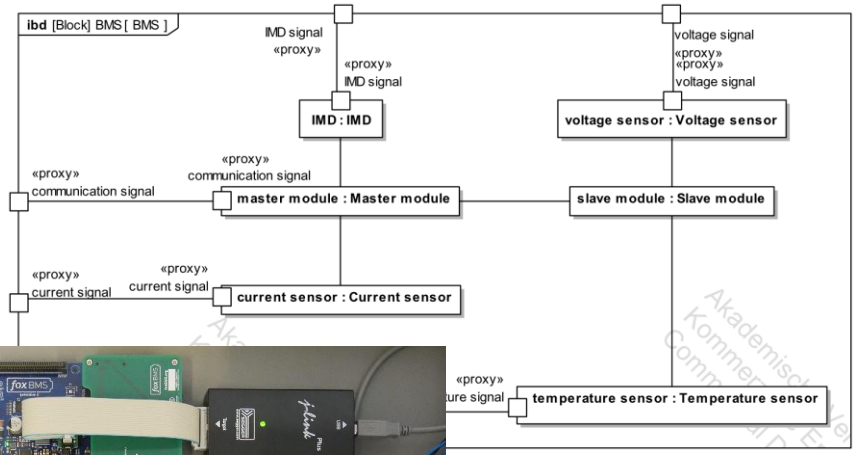
UNIVERSITÄT BAYREUTH

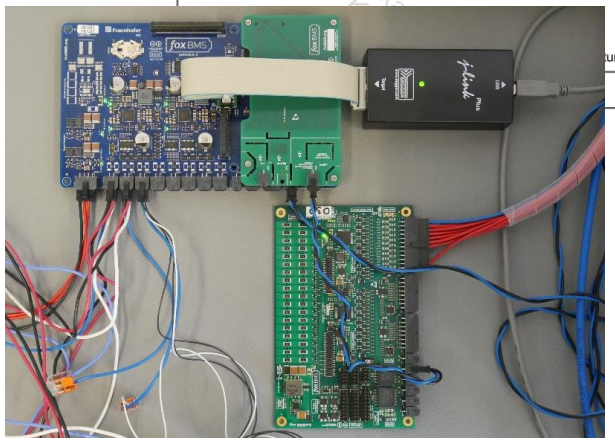
Functional Model of Battery Management Systems

The battery management system (BMS) is an essential part of a battery system tasked with ensuring the safety, optimizing the performance and increasing the efficiency. To fulfill these requirements the BMS must possess different functions (e.g. monitoring the SOC) which can be implemented in wide range of technical solutions.

The aim of this research module is to implement a functional model of the BMS, using SysML, which enables the comparison of different physical architectures. Throughout the module, you will have the opportunity to:

- Deepen your knowledge about Battery Management Systems
- Gain experience in the application of Model Based Systems Engineering (MBSE)
- Learn to work with CATIA Magic Systems of Systems Architect, one of the most widely used Systems Engineering tools in industry





Qualifications:

- Basic knowledge about Battery Management Systems
- Ideally basic knowledge of Systems Engineering and SysML
- Independent and careful way of working

Contact:

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