# Projektvereinbarung

**Verfasser/innen:** Joel Schaller **Klasse:** BEN21

**Titel:** CircuitVoyager pre1



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| 1. **Thema** (Hintergrund, Überblick, gegenwärtiger Wissensstand)     Develop a tiny extension Board for the STM32H747i-Disco Board, to allow it to act as a DMM.  Additionally, a software, that measures the DMM Values and displays them on the Touch Display. If there's more time I could extend the Project with Measurement Logging via a SD-Card or over USB to a Desktop application. |
| 1. **Eigene Fragestellung / Untersuchungsgegenstand**   2.1 Eigene Fragestellung (Leitfrage) How to implement the following functions / protocols? (QSPI Flash, SDRAM, TouchGFX, Mipi DSI) and if the time is sufficient: (FAT with SDcards, Bootloaders)  2.2 Hypothese (Vermutung über das Ergebnis)  I want to learn, working with High Speed MCUs and implement such protocols.  2.3 Methoden und Vorgehen (mindestens 2 Methoden müssen angewendet werden)  HW-Dev (Altium), SW-Dev (STM32Cube with HAL), Documentation in LaTeX  2.4 Hilfsmittel  Internet, literature  2.5 Kontaktpersonen, Informationsstellen, Institutionen  Teachers, Instructor at ETH, Dad |
| 1. **Persönlicher Bezug / Motivation**   In the next 2 Years I want to develop my own DMM, because I think there’s much to improve with standard DMMs as Fluke. For Example: Touch Display, Rechargeable Battery… |
| 1. **Bewertungsform**   This Project will only be done by me. Time: about 28 lesson and unknown time at home. Project delivery on: 12.01.2023 |
| 1. **Besprechungstermine mit Lehrperson** (vorgeschrieben sind zwei Besprechungen)   Termin 1: 27.10.2023  Termin 2: 01.12.2023 |
| Datum: Die Lernenden:  Datum: Die Lehrperson: |
| DMM = Digital Multimeter  TouchGFX = Graphical Designer for Embedded Touch Displays |