



USART1: GDB Port  
TRACESWO: External debugger  
SPI1: JTAG interface (SPI and bit-bang)  
SPI2: SBW interface (SPI and bit-bang)  
TIM1: JTMS signal generation  
GPIO: LEDG, JTAG (partial)

Rev2: Swap LRXD and LTXD; Swap nTMS and JENA;  
Redesign of the output buffers.  
Flexible enable signal covering all operations  
independently.

BluePill and BlackPill option  
**Mathias Gruber**  
Sheet: /  
File: BlackPill-BMP.kicad\_sch

### Title: MSPBMP Development Protoboard

Size: A4 Date: 2022-11-17  
KiCad E.D.A. kicad (6.0.9)

Rev: 2  
Id: 1/1