

The schematic diagram illustrates the electrical connections for an STM32F407VGT6 microcontroller. The main components and their connections are as follows:

- STM32 (U12A):** The central microcontroller with various peripheral pins connected to external components like UART, SPI, I2C, and GPIO.
- PWR (Power):** A 3.3V power regulation section featuring a ferrite bead (L6), a 47ohm resistor (R37), and decoupling capacitors (C42, C44, C43, C45) connected to VREF and VDDA.
- STM FLASH:** A 6130061121 memory chip connected to the STM32 via a 10K resistor (R43) and other pins.
- UART_FLASH:** A 61300311121 UART module connected to the STM32 via a 10K resistor (R43) and other pins.
- Reset and Boot:** A reset button (BOOT1) connected to the STM32 reset pin (STM_RESET) and a 3.3V supply.
- Crystal Oscillator:** A crystal oscillator (Y4) connected to the STM32 pins.
- Battery and Decoupling:** A battery (BT1) connected to the 3.3V supply, with decoupling capacitors (C36, C37, C35) for power stability.

Title:		
Size: A3	Date:	Rev:
KiCad E.D.A. 8.0.5-rc1		Id: 6/12