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| --- | --- |
| Date | Notes |
| 10/5/17 | MCU: STM32F072C8  Package: LQFP-48  Link for MCU:  <http://www.st.com/content/st_com/en/products/microcontrollers/stm32-32-bit-arm-cortex-mcus/stm32-mainstream-mcus/stm32f0-series/stm32f0x2/stm32f072c8.html> |
|  | LQFP48.PNG |
| 10/6/2017 | **NOT DONE:** Emailed Andrew asking question on how to setup interface. |
|  | Look into bootloader, and driver. |
|  | **Bootloader General Information:** Page 13  In Programmers Manual: 52  Boot loader is in System Memory. Make sure to boot from System Memory when wanting to build/upload code.  Look up what the boot selector option bit is.  How to boot for uploading code:   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | nBoot1 | BOOT0 pin | BOOT\_SEL | nBOOT0 bit | | System Memory | 1 | 1 | 1 | X | |
|  | Embedded Boot Loader:   * Located in system memory. * Supports following serial interfaces: UART, I2C, and USB DFU. * See AN2606 for more info. |
|  | Video for setting up bootloader for building code:  <https://www.youtube.com/watch?v=Kx7yWVi8kbU> |
|  | **Power Requirements:**  Vdd = 2.0 - 3.6 V.  Vdda = 2.0 - 3.6 V. - Analog supply voltage.  Check pinout for VDDA and VDD. |
|  | **USB PinOuts:** |
|  | **Design Thought:**  Low power INFO: Page 15 (Product Specifications)  Use low power mode to our advantage. Sleep mode will wake the CPU whenever an interrupt is fired. Use DMA to collect data, then send interrupt once done to wake CPU and perform calculation. Use interrupt for full buffer.  Or use allocated registers in standby mode to save more power. |
| 10/9/2017 | Found a simple article which explains how to wire a micro usb port:  http://neverstopbuilding.com/wiring-micro-usb-pinout |
| 10/10/2017 | Look into how to prototype a MCU. Setting up the hardware and connecting pins is what we’re concerned with here. |
|  | Look into hardware which helps connecting pins easier. |
|  | Next, look how to interface our sensor with the MCU. Look at voltage requirements and where to grab information from, like registers and stuff. |
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