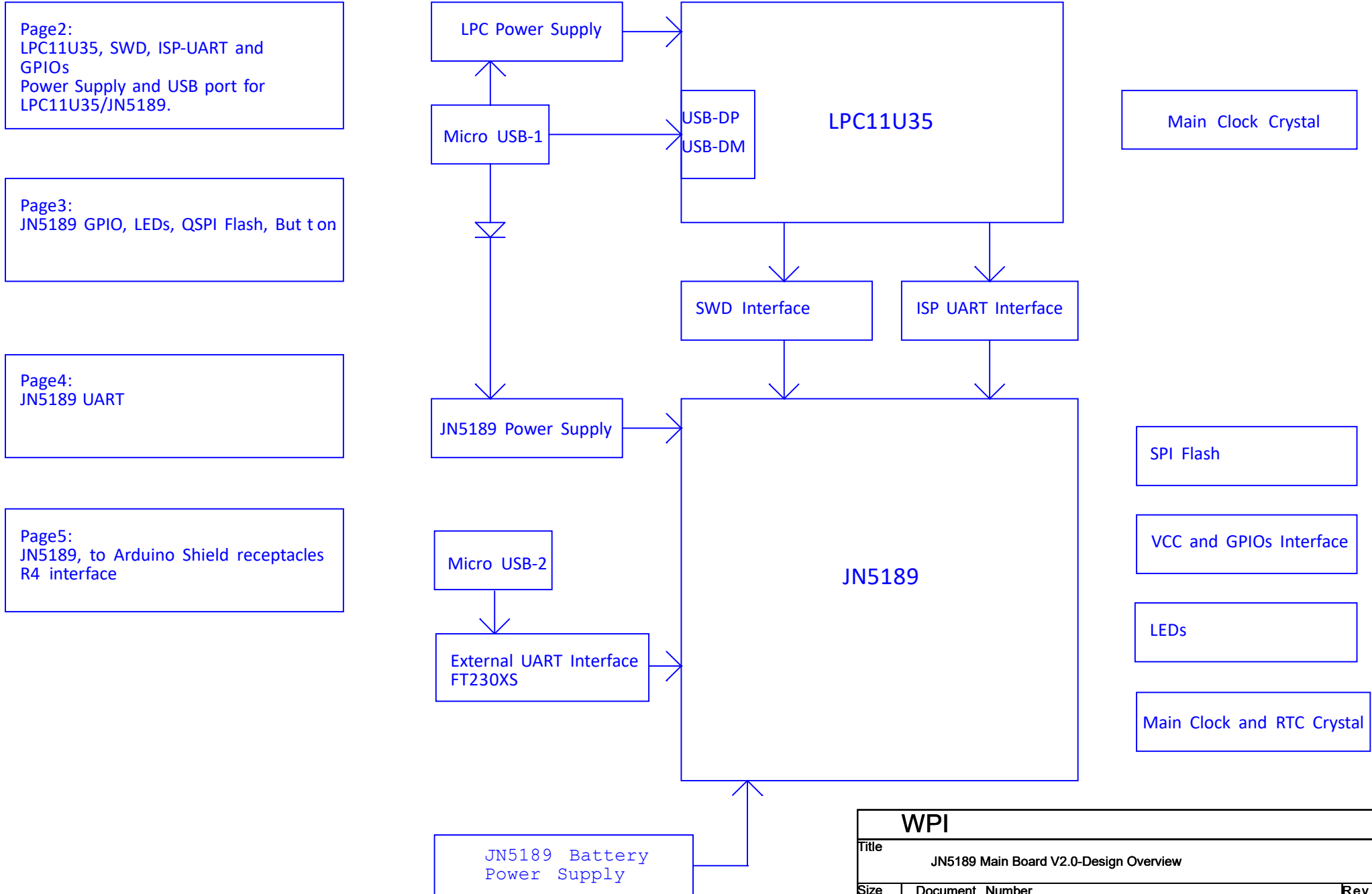
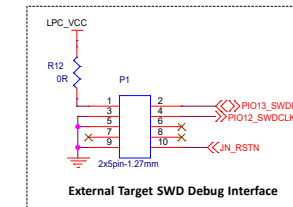
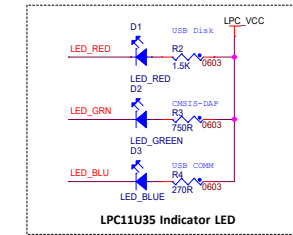
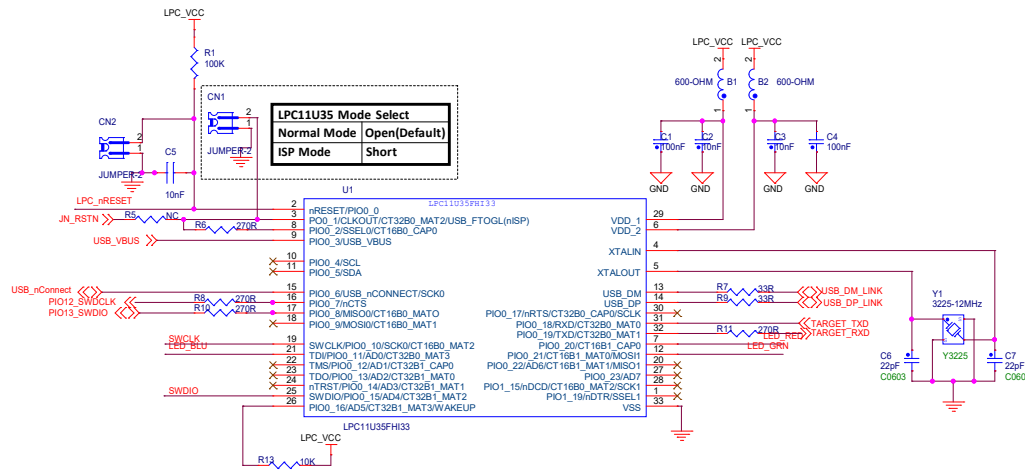
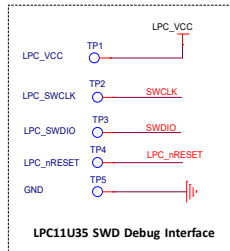


# Design Overview



WPI		
Title		
JN5189 Main Board V2.0-Design Overview		
Size A	Document Number	Rev V2.0
Date:	Monday, December 23, 2019	Sheet 1 of 5

## LPC11U35 GPIOs Interface



MB\_VCC\_5V = 5 V

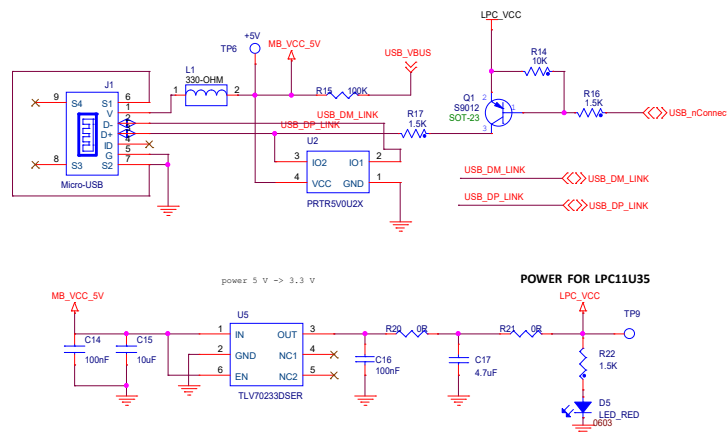
LPC\_VCC = 3.3 V

VCC\_5V = 5 V

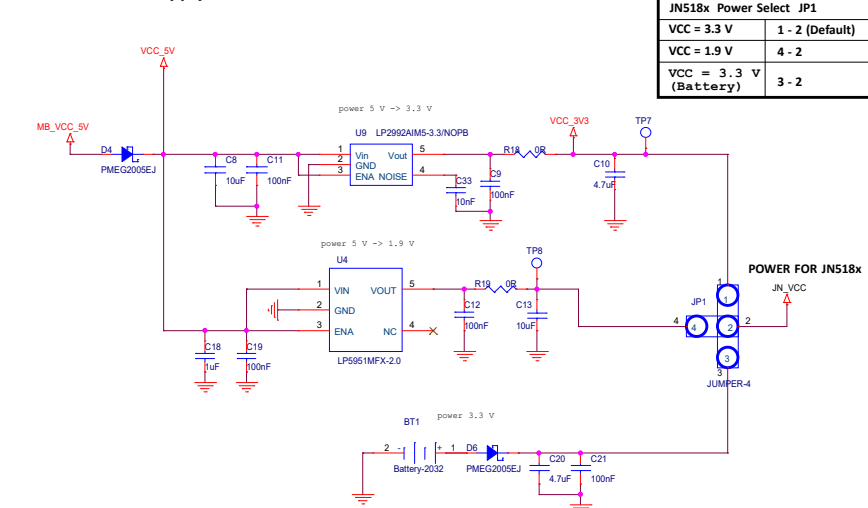
VCC\_3V3 = 3.3 V

JN\_VCC = 3.3 V / (1.9 V) for JN5189

## LPC11U35 USB Interface and Power Supply

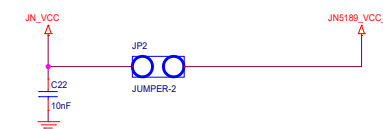


## JN518x Power Supply



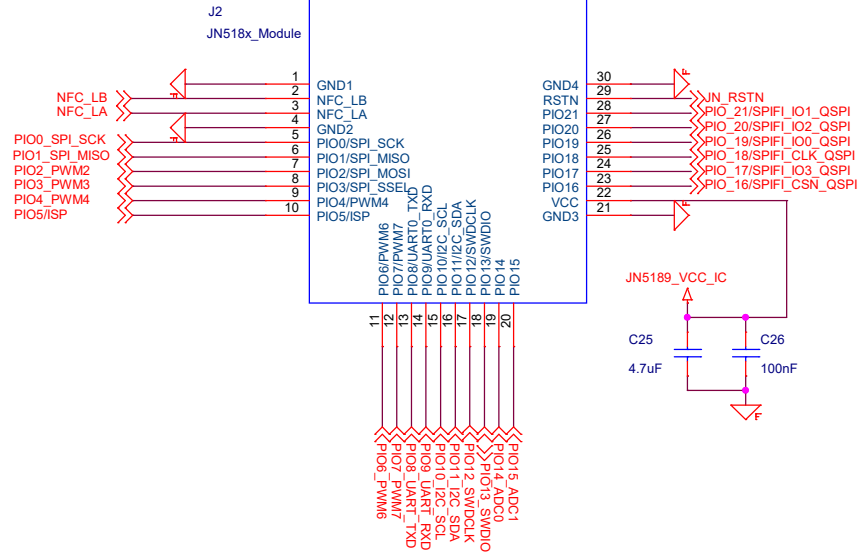
JN518x Power Select JP1	
VCC = 3.3 V	1 - 2 (Default)
VCC = 1.9 V	4 - 2
VCC = 3.3 V (Battery)	3 - 2

## JN5189 Consumption Current Test



WPI	
Title	JN5189 Main Board V2.0 - LPC11U35
Size C	Document Number
Date:	Monday, December 23, 2018
Sheet	2 of 5
Rev	V2.0

## JN518x - ZigBee



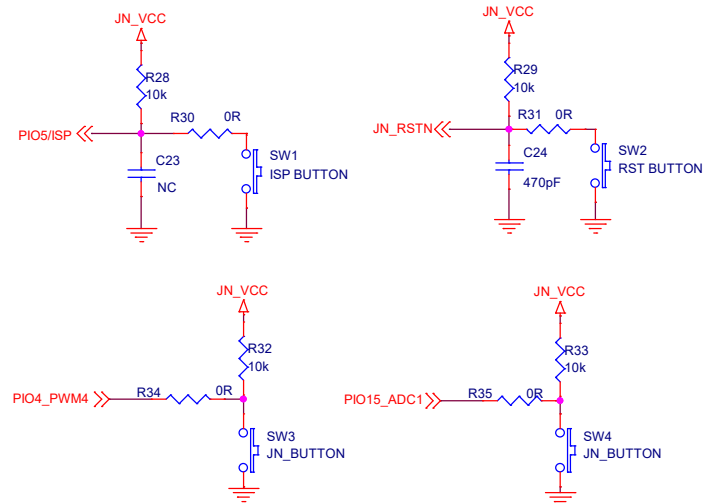
### JN518x I2C Pull Up



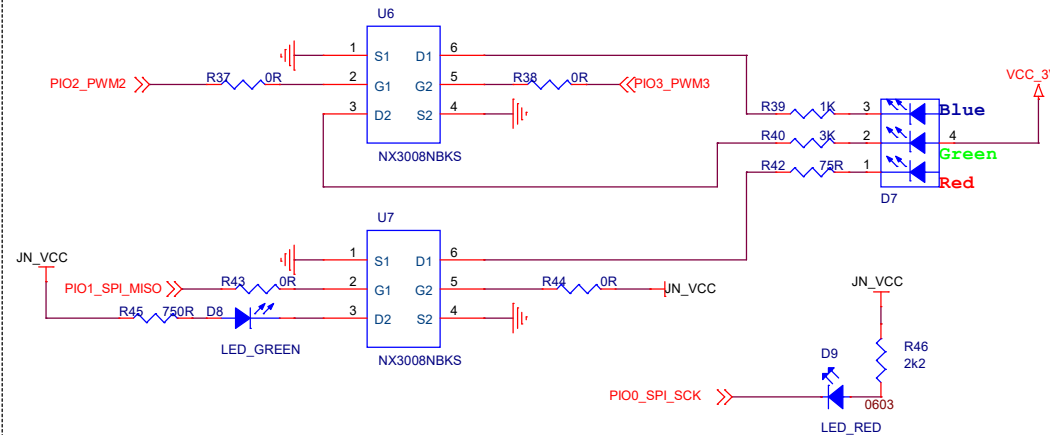
### JN5189 Module Ground Isolation



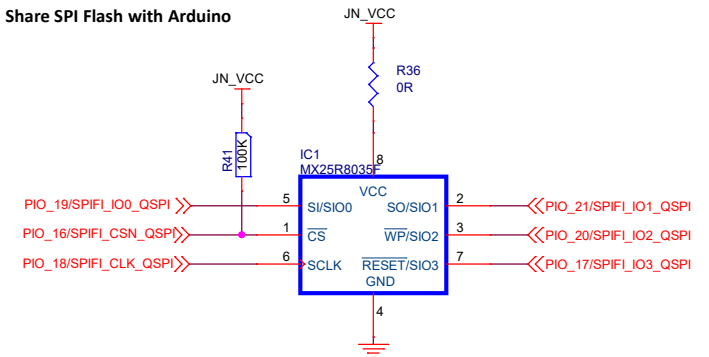
### JN518x Button



### RGB LED and JN518x Power LED



### Share SPI Flash with Arduino



### WPI

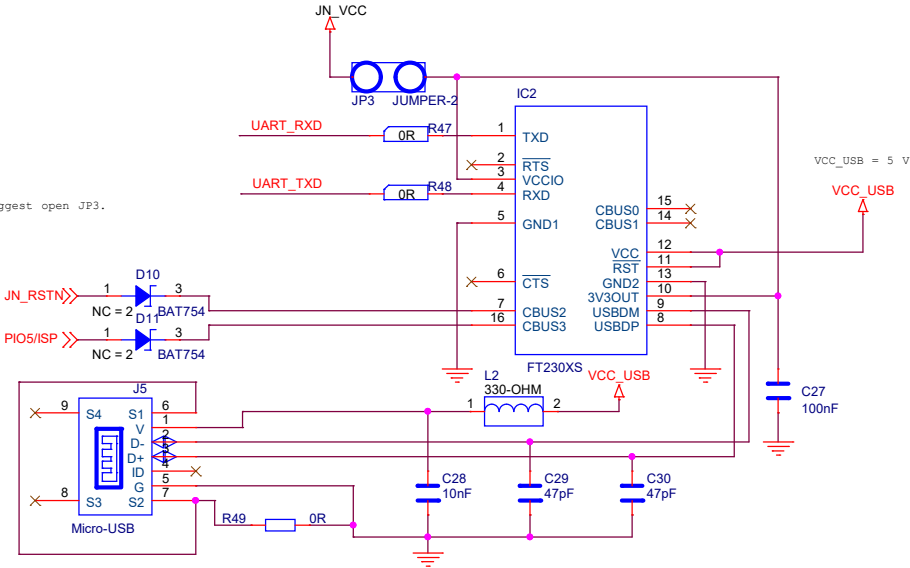
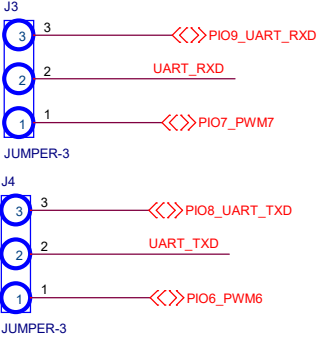
Title		
JN518x Main Board V2.0-ZigBee IC		
Size	Document Number	
B		
Date:	Monday, December 23, 2019	Sheet 3 of 5
		Rev V2.0

USB - UART

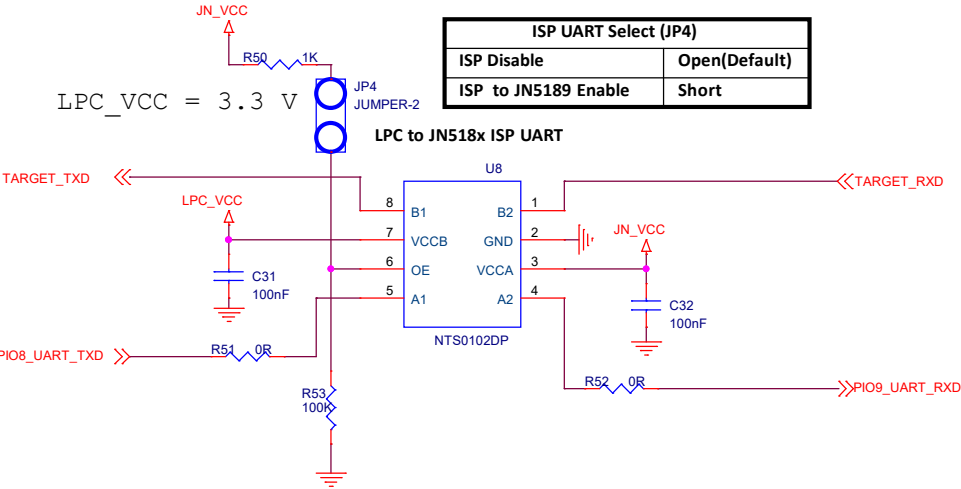
UART Select J3 and J4	
connect UART0	2-3
connect UART1	1-2

USB Power Source for JN518x Select(JP3)	
USB J1	Open
USB J5	Short

ps.If two micro usb both to be used, suggest open JP3.



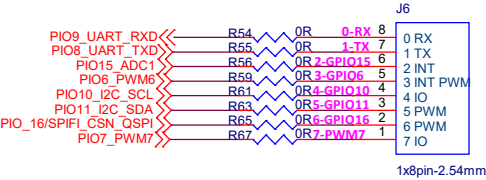
LPC11U35 - ISP UART



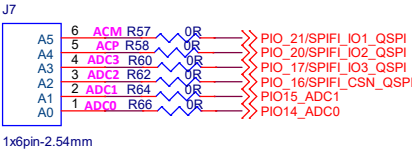
WPI		
Title	JN5189 Main Board V2.0-UART	
Size B	Document Number	Rev V2.0
Date:	Monday, December 23, 2019	Sheet 4 of 5

Arduino Shield receptacles R4

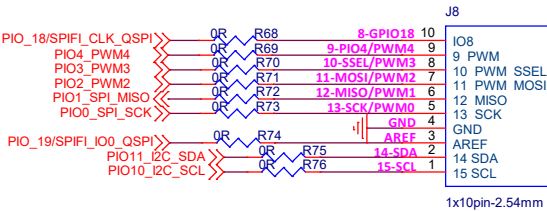
Digital



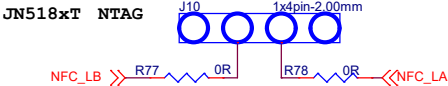
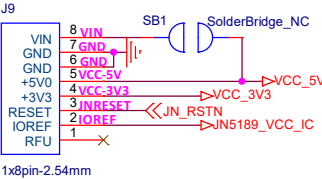
Analog In



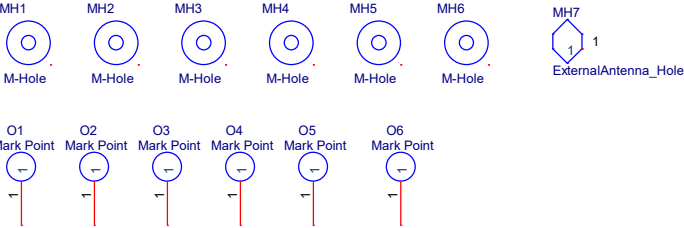
Digital



Power



Board Assemle Holes and Optical Mark Point



WPI		
Title		
JN5189 Main Board V2.0 - External Interface		
Size		
B		
Date:		
Monday, December 23, 2019		
Sheet		
5 of 5		
Rev		
V2.0		