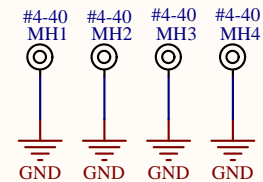
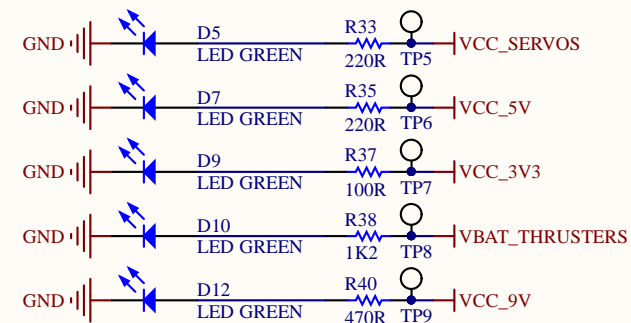


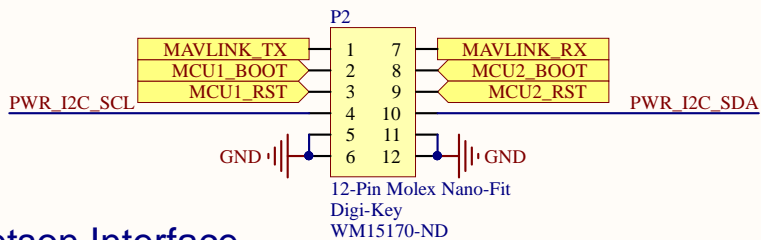
MCU LED Indicators



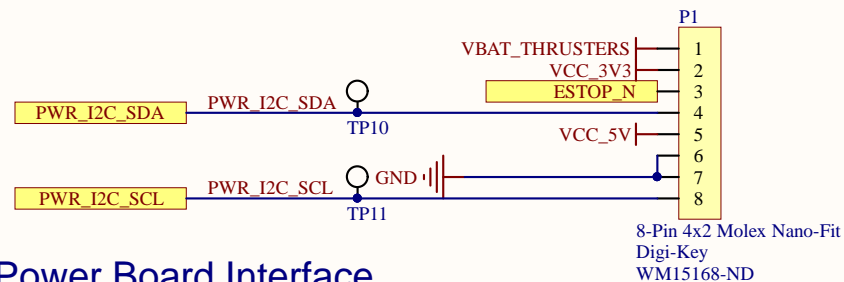
Mounting holes



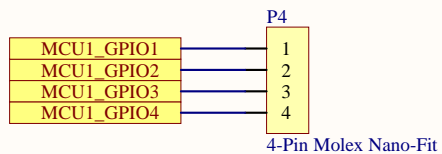
Power Indicators



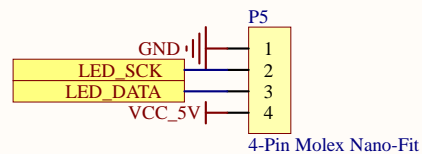
Jetson Interface



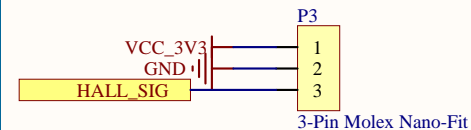
Power Board Interface



GPIO



DotStar LEDs



Kill Switch

Title

Interface

Size

A

Number

Revision

Date:

5/6/2019

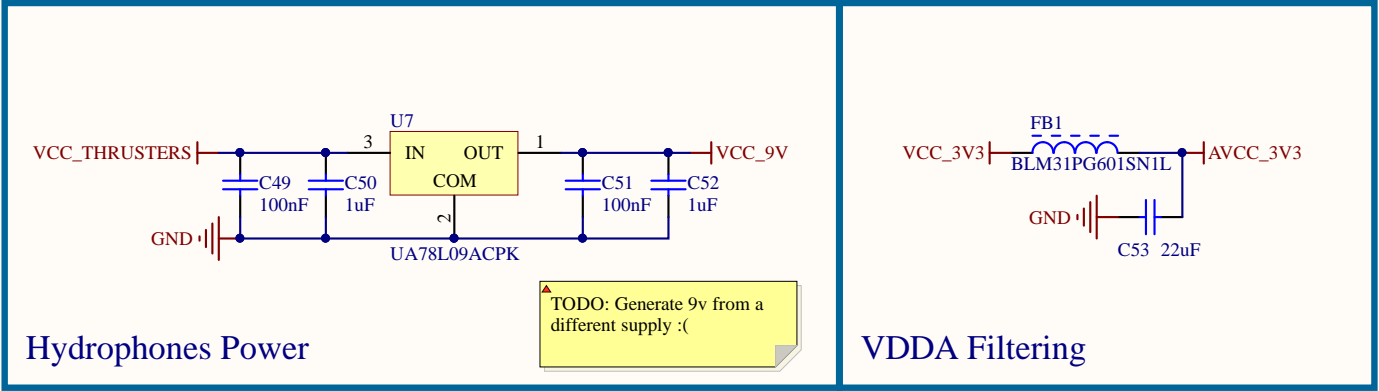
Sheet

of

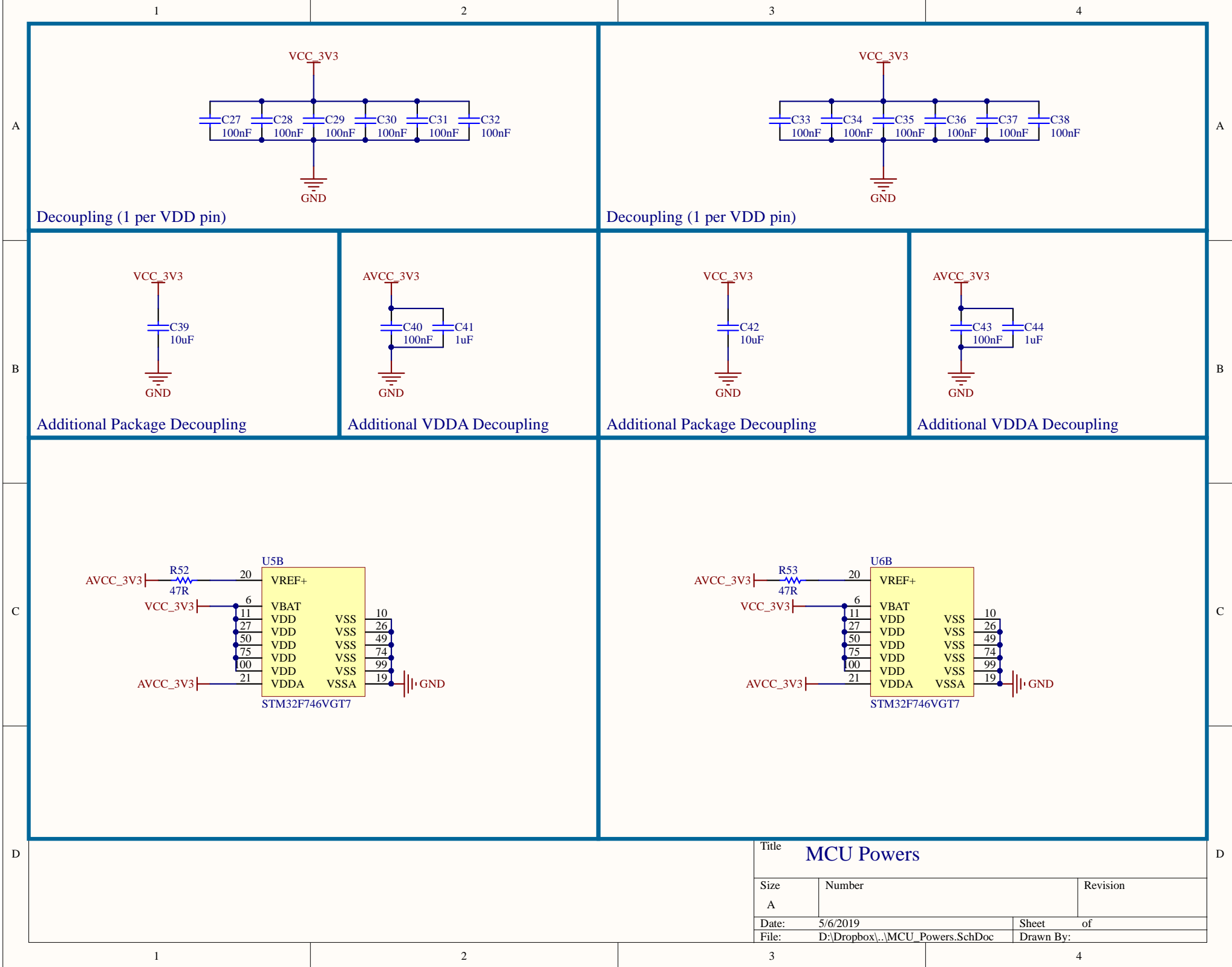
File:

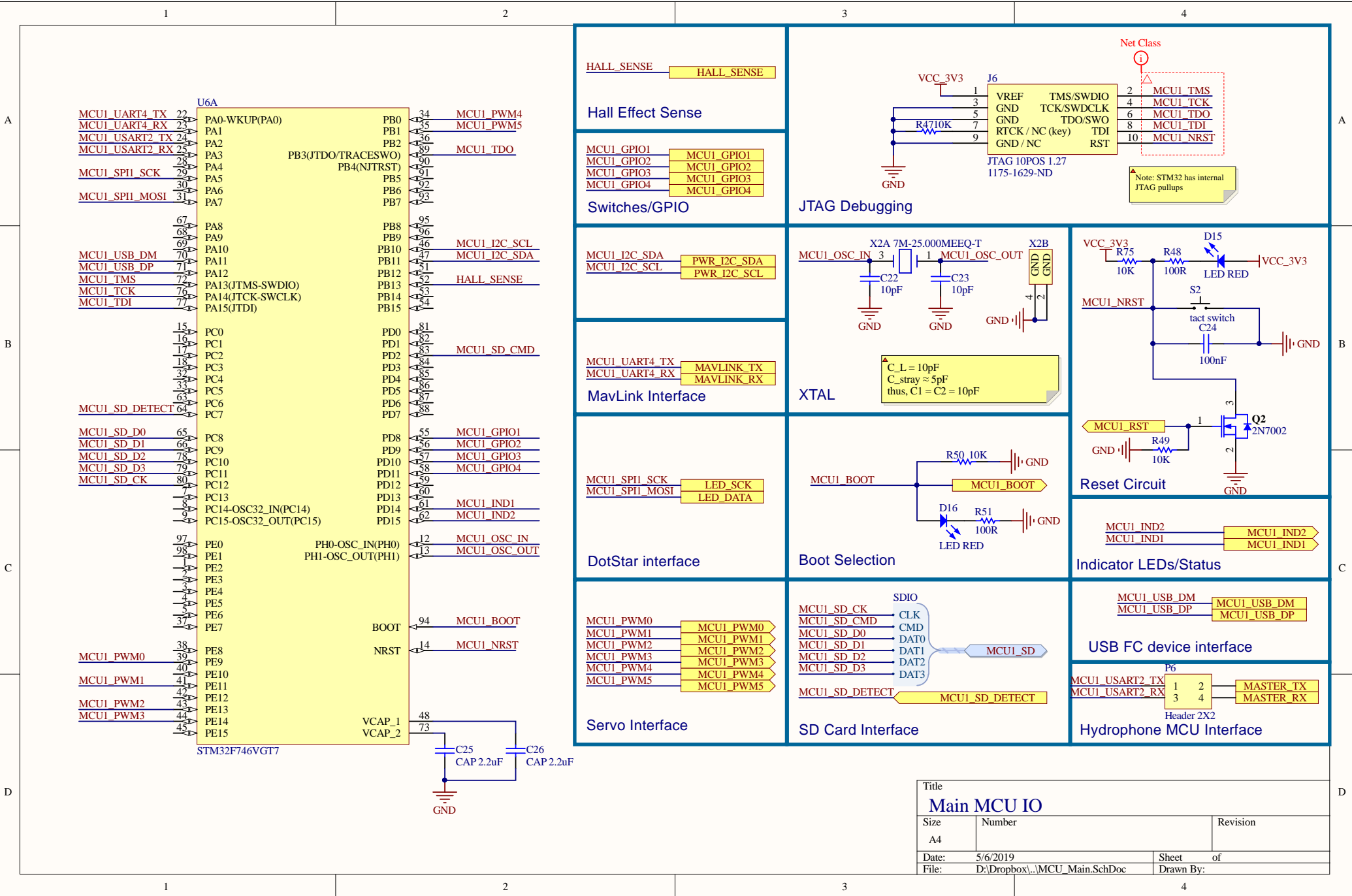
D:\Dropbox\...\Interface.SchDoc

Drawn By:

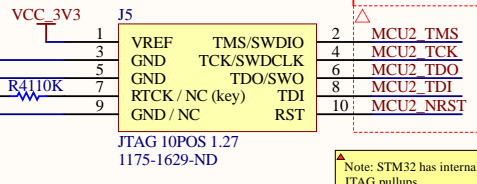


Title			
Power Supplies			
Size	Number		Revision
A			
Date:	5/6/2019	Sheet	of
File:	D:\Dropbox\...\Power.SchDoc	Drawn By:	

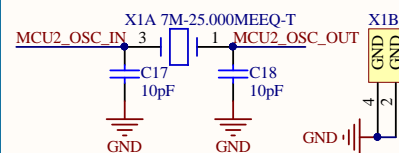




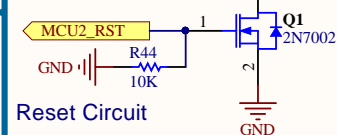
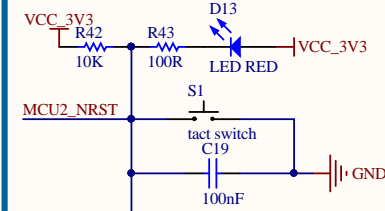
Title		
Main MCU IO		
Size	Number	Revision
A4		
Date:	5/6/2019	Sheet of
File:	D:\Dropbox\...\MCU_Main.SchDoc	Drawn By:



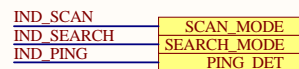
▲ Note: STM32 has internal JTAG pullups



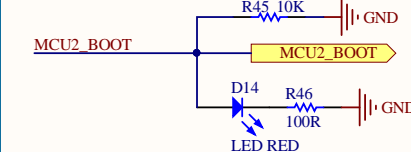
$C_L = 10\text{pF}$
 $C_{\text{stray}} \approx 5\text{pF}$
 thus, $C_1 = C_2 = 10\text{pF}$



Reset Circuit



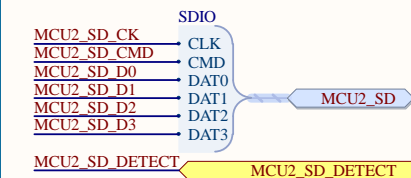
Hydrophone Indicators



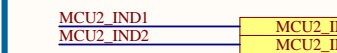
Boot Selection



Hydrophone Interface



SD Card Interface



Indicator LEDs/Status

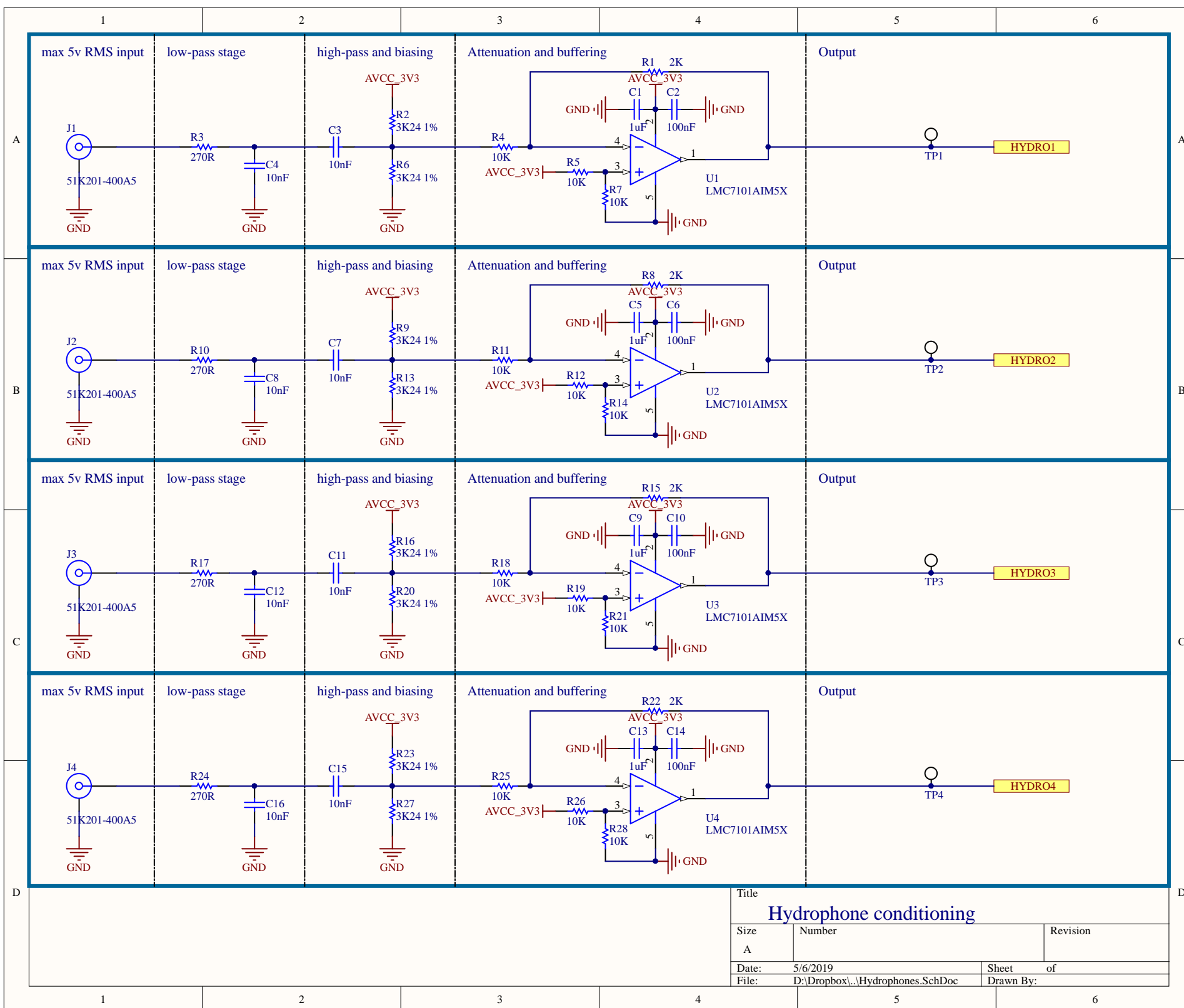


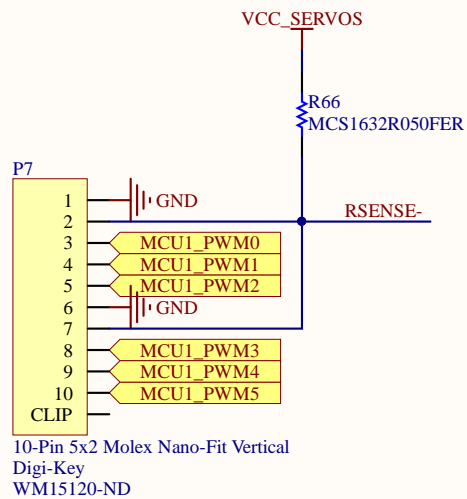
USB FC device interface



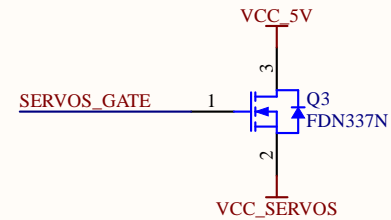
Master MCU Interface

Title			
Hydrophone MCU IO			
Size A4	Number		Revision
Date:	5/6/2019	Sheet	of
File:	D:\Dropbox\...MCU_Hydro_SchDoc	Drawn By:	

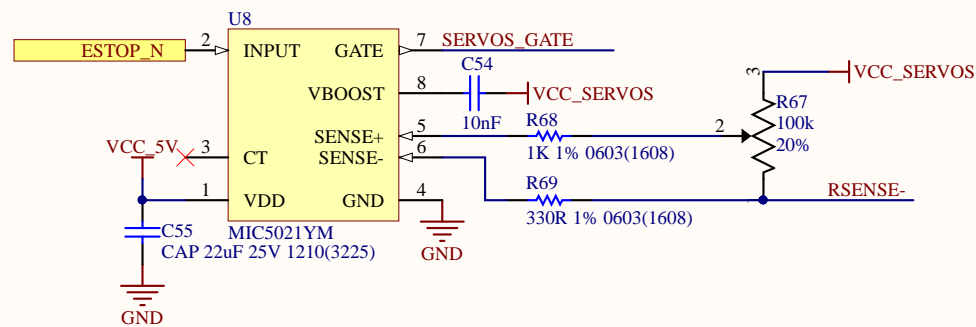




Servo connector



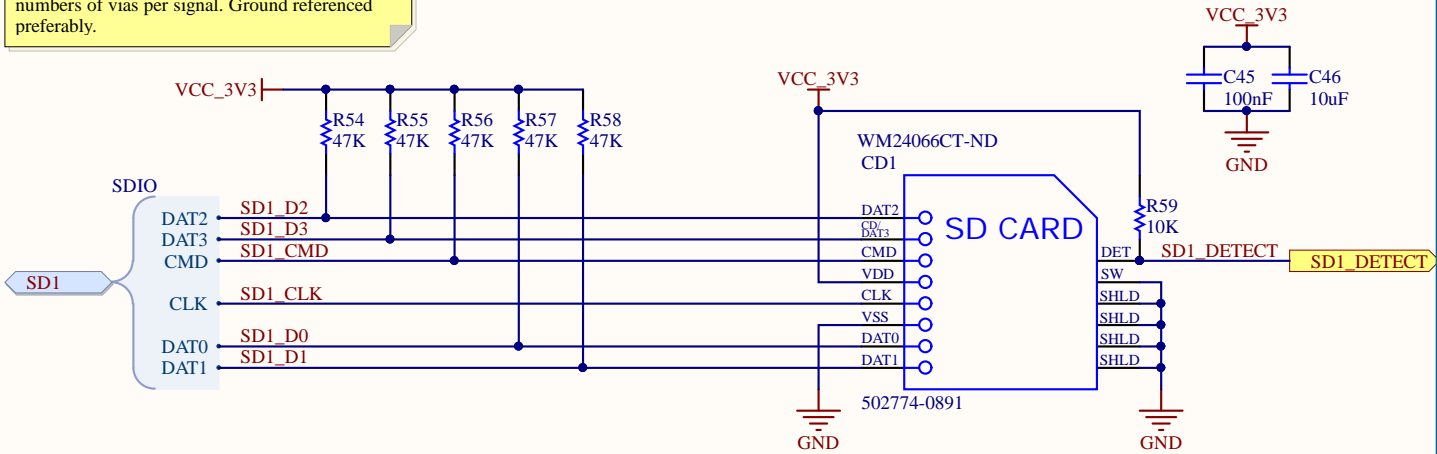
Servo Disconnect Switch



Servo Disconnect gate driver and overcurrent

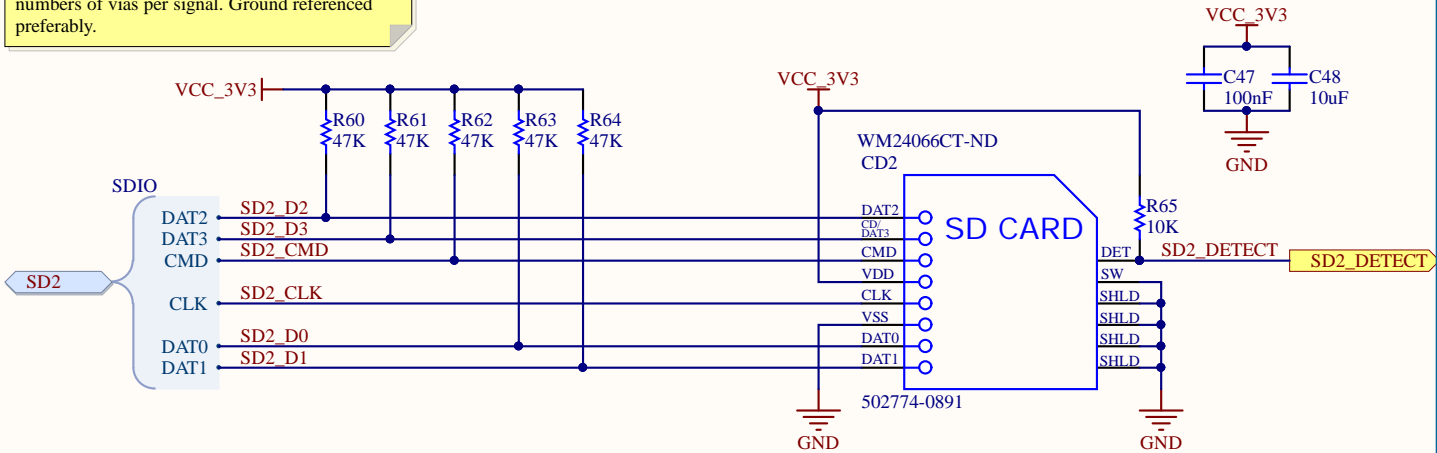
Title Servos		
Size A	Number	Revision
Date: File:	5/6/2019 D:\Dropbox\...\Servos.SchDoc	Sheet Drawn By:

Note: SDIO Transmission lines must be length matched with 50 ohm impedance. Maintain equal numbers of vias per signal. Ground referenced preferably.



SD Card Reader `

Note: SDIO Transmission lines must be length matched with 50 ohm impedance. Maintain equal numbers of vias per signal. Ground referenced preferably.



SD Card Reader 2

Title		
SD Cards		
Size	Number	Revision
A		
Date:	5/6/2019	Sheet of
File:	D:\Dropbox\...\SD.SchDoc	Drawn By:

1		2		3		4	
A							
B							
<div><div><div><div><div>USB1_D-</div><div>USB1_D+</div></div><div><div>1</div><div>2</div><div>3</div><div>4</div><div>5</div></div><div><div>VBUS</div><div>D-</div><div>D+</div><div>ID</div><div>GND</div></div><div><div>1</div><div>2</div><div>3</div><div>4</div><div>5</div></div><div><div>J7</div><div>ZX62D-AB-5P8</div></div><div><div>GND</div></div></div></div><div>Main MCU USB for DFU</div></div> <div><div><div><div>USB2_D-</div><div>USB2_D+</div></div><div><div>1</div><div>2</div><div>3</div><div>4</div><div>5</div></div><div><div>VBUS</div><div>D-</div><div>D+</div><div>ID</div><div>GND</div></div><div><div>1</div><div>2</div><div>3</div><div>4</div><div>5</div></div><div><div>J8</div><div>ZX62D-AB-5P8</div></div><div><div>GND</div></div></div></div> <div>Hydrophone MCU USB for DFU</div>							
C							
D							
1		2		3		4	

Title		
USB DFU		
Size	Number	Revision
A		
Date:	5/6/2019	Sheet of
File:	D:\Dropbox\...\USB.SchDoc	Drawn By: