

M1



MOUNTING\_HOLE

M2



MOUNTING\_HOLE

M3



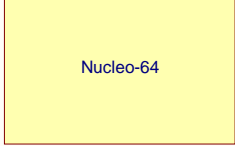
MOUNTING\_HOLE

M4



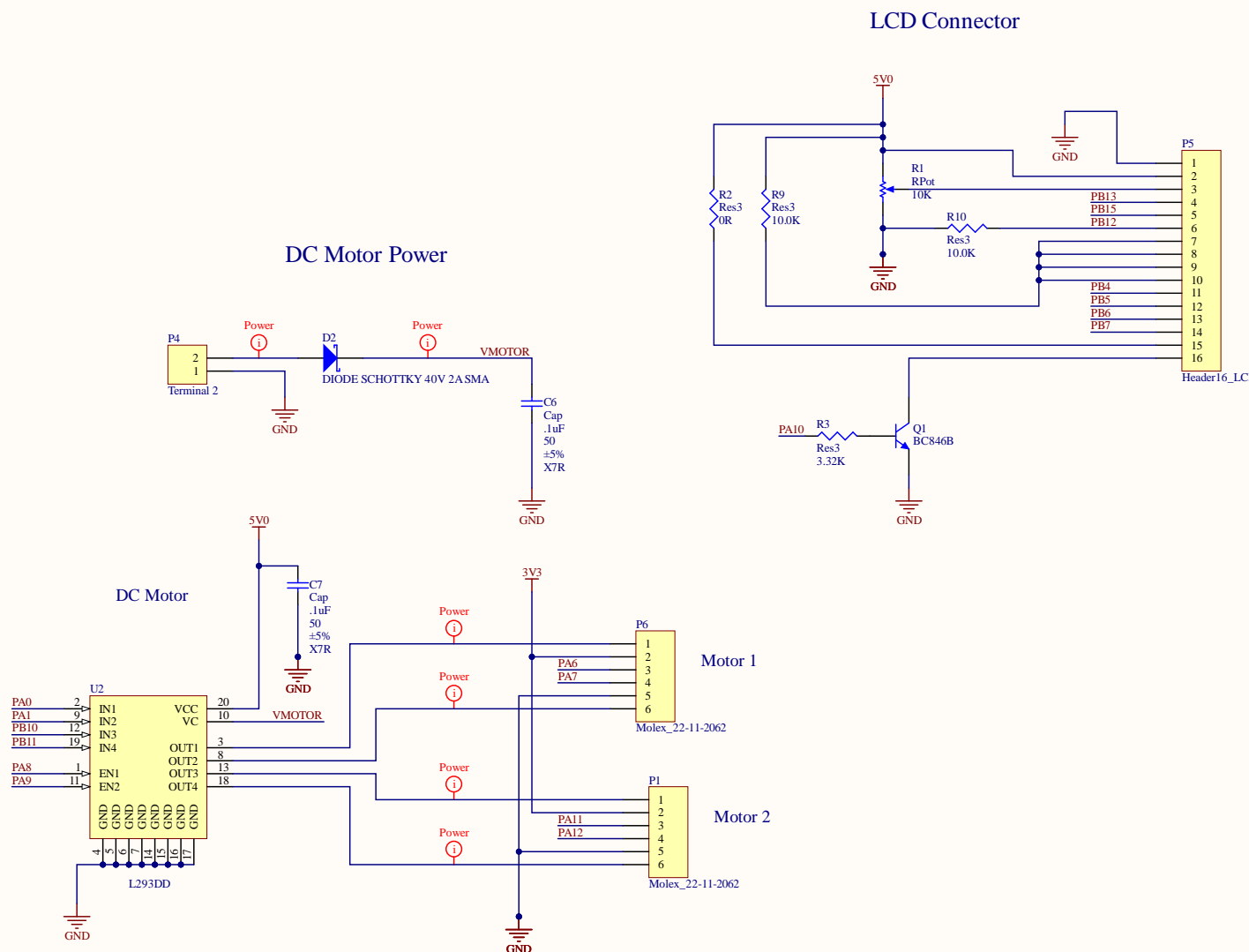
MOUNTING\_HOLE

M5



Nucleo-64

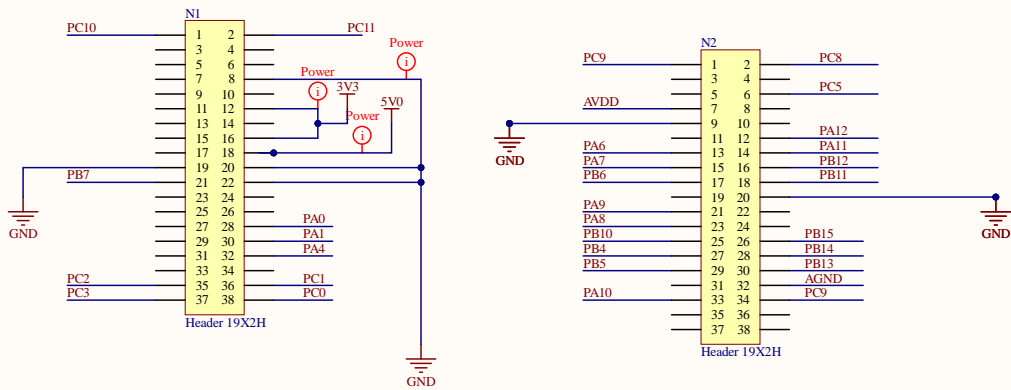
Title		
Mechanical Parts		
Size	Number	Revision
A4		1
Date:	7-19-2020	Sheet of
File:	E:\semester 2\.\Mechanical.SchDoc	Drawn By: Mike Jarabek



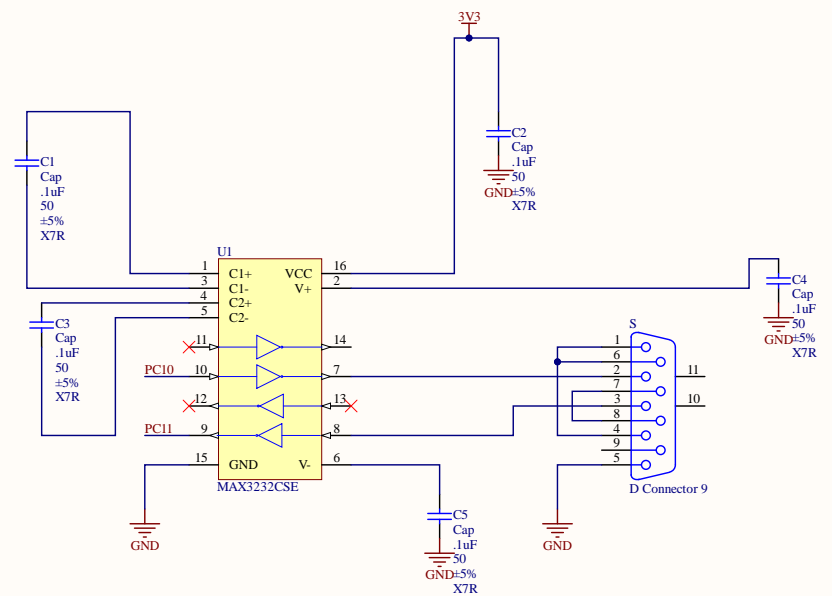
Note:- Pull Down required on E signal to ensure it does not float high during reset

Title DC Motor and LCD connector		
Size B	Number	Revision
Date: 7-19-2020	Sheet of *	
File: E:\semester 2\...\Motor and LCD.SchDoc	Drawn By: Simran Padaniya	

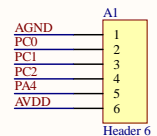
Nucleo-64 Morpho Connectors



RS-232 Interface



Analog I/O



Title			
STM32F3 Discovery Expander			
Size	Number	Revision	
B		A	
Date:	7-19-2020	Sheet	of*
File:	E:\semester 2\...\Nucleo.SchDoc	Drawn By	Simran Padaniya





Comment	Description	Designator	Footprint	LibRef	Quantity
Header 6	Header, 6-Pin	A1	HDR1X6	Header 6	1
HC-05	Inverter IC 6 Channel Open Drain 14-SOIC	BM	XCVR_HC-05	HC-05	1
Cap	CAP CER .1uF 50v X7R 0805, CAP CER 220pF 50v X7R 0805	C1, C2, C3, C4, C5, C6, C7, C9, C10, C11, C12	CAPC2012X09M	CAP-X7R-.1uF-50V- ±5%, CAP-X7R-220pF- 50V±10%	11
Cap Pol	CAP 85C 10uF ±20% 35V WX Series Aluminum Electrolytic	C8	CAPACITOR_5MM	Cap Polar-10uF-35V	1
DIODE SCHOTTKY 40V 2A SMA	Schottky Rectifier	D1, D2	DIOM4326X23M	DIODE SCHOTTKY 40V 2A SMA	2
MOUNTING_HOLE	Mounting Hole	M1, M2, M3, M4	MOUNTING_HOLE	MOUNTING_HOLE	4
Nucleo-64	Nucleo-64 Board Model	M5	NUCLEO_64	Nucleo-64	1
Header 19X2H	38 Position Header Connector 0.100in (2.54mm) Through Hole Gold	N1, N2	PPPC192LFBN-RC	Header 19X2H	2
Molex_22-11-2062	CONN HEADER 6POS .100 VERT GOLD	P1, P6	MOLEX_22-11-2062	Molex_22-11-2062	2
Terminal 2	Terminal, 2-Pin	P4, P8	TYCO_282841_2	Terminal 2	2
Header16_LCD	Header, 16-Pin Female	P5	HDR1X16_LCD	Header16_LCD	1
Molex_22-11-2042	CONN HEADER 4POS .100 VERT GOLD	P9	MOLEX-22-11-2042	Molex_22-11-2042	1
MCP9700-E/TO	Temperature Sensor Analog, Local -40Â°C ~ 125Â°C 10mV/Â°C TO- 92-3	Q	TO127P254X533-3	MCP9700-E/TO	1
BC846B	TRANS NPN 65V 0.1A SOT23	Q1	SOT95P230X110-3M	BC846B	1
RPot	POT 10K OHM THUMBWHEEL CERM ST	R1	BOURNS_3386F	RPot	1
Res3	RES SMD 0 OHM 5% 1/8W 0805, RES SMD 3.32K OHM 1% 1/8W 0805, RES SMD 8.25K OHM 1% 1/8W 0805, RES SMD 4.75K OHM 1% 1/8W 0805, RES SMD 47.5K OHM 1% 1/8W 0805, RES SMD 10.0K OHM 1% 1/8W 0805	R2, R3, R6, R7, R8, R9, R10	RESC2112X05M	Resistor_OR_Jumper, Resistor_3.32K, Resistor_8.25K, Resistor_4.75K, Resistor_47.5K, Resistor_10.0K	7
Res3	RES SMD 0.47OHM 5% 1W 1210	R4, R5	RESC3125X07M	Resistor_0.47R_1W	2
D Connector 9	Receptacle Assembly, 9 Position, Right Angle	S	DSUB1.385-2H9	D Connector 9	1
HC-SR04	HC-SR04 Ultrasonic Sensor Platform Evaluation Expansion Board	U	XCVR_HC-SR04	HC-SR04	1
MAX3232CSE	3.0V TO 5.5V, Low- Power, up to 1Mbps, True RS-232 Transceiver Using Four 0.1µF External Capacitor	U1	NSO16_N	MAX3232CSE	1
L293DD	IC MOTOR DRIVER PAR 20-SOIC	U2	SO20_N	L293DD	1
LV8712T-TLM-H	IC MOTOR DRIVER PAR 24TSSOP	U3	ONSEMITSSOP50P640 X120-24M	LV8712T-TLM-H	1