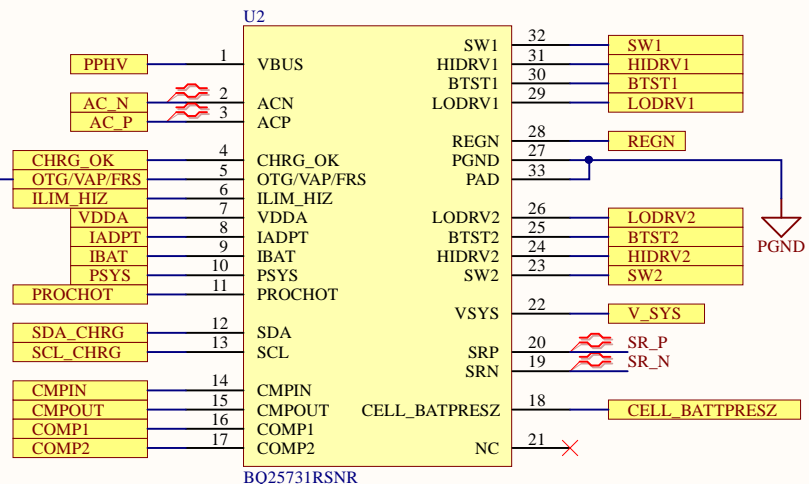
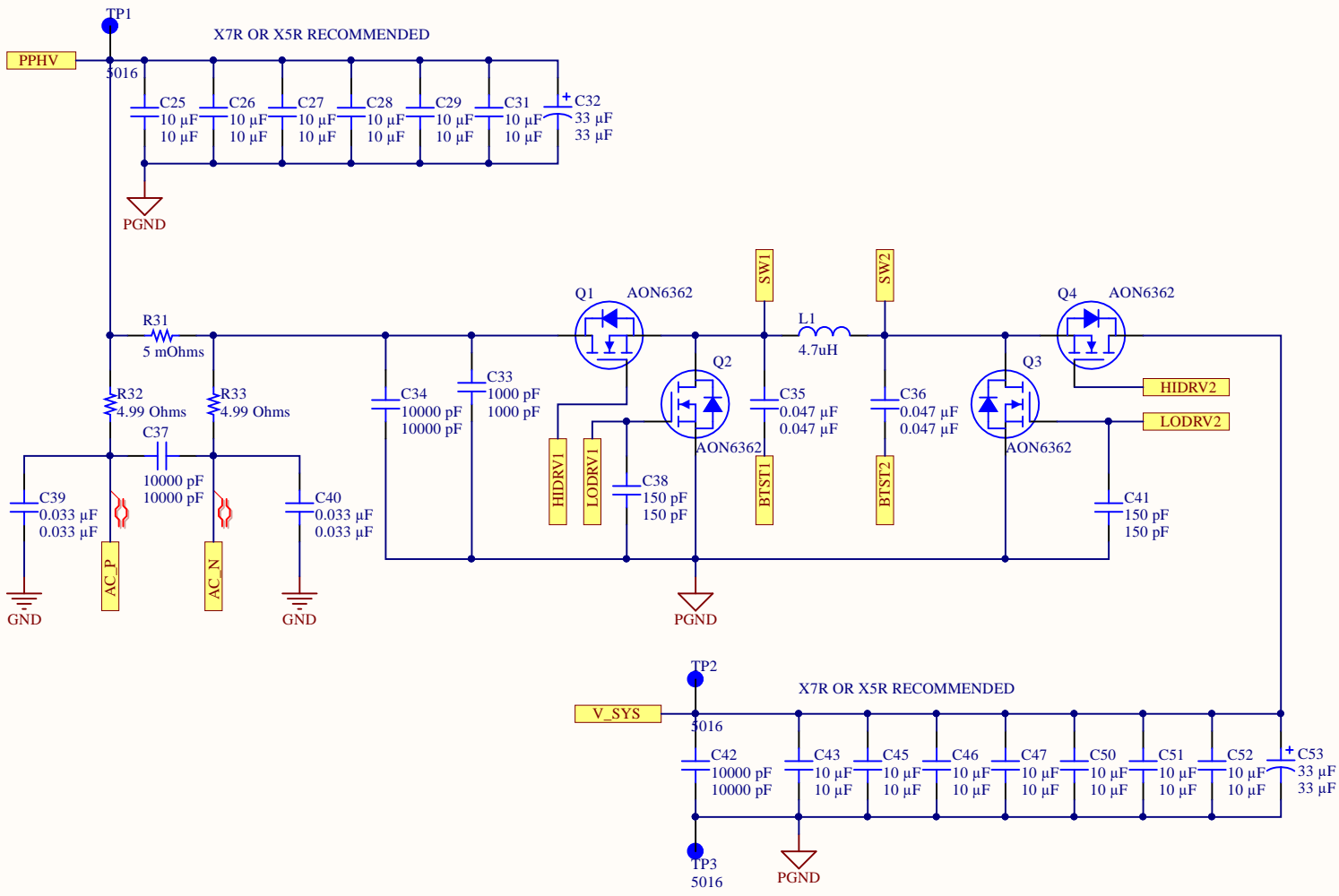


OTG PIN MAY BE CONTROLLED BY PD IC

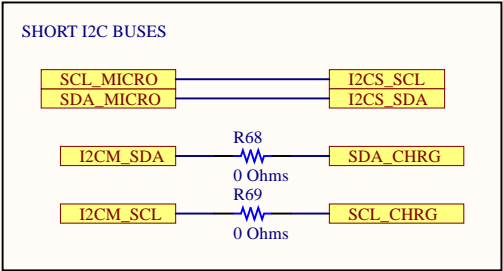
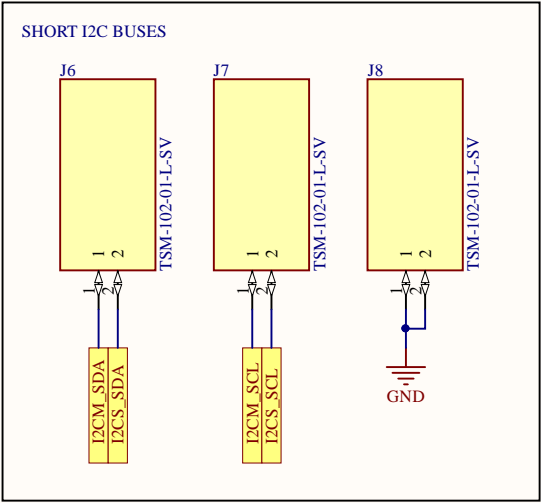
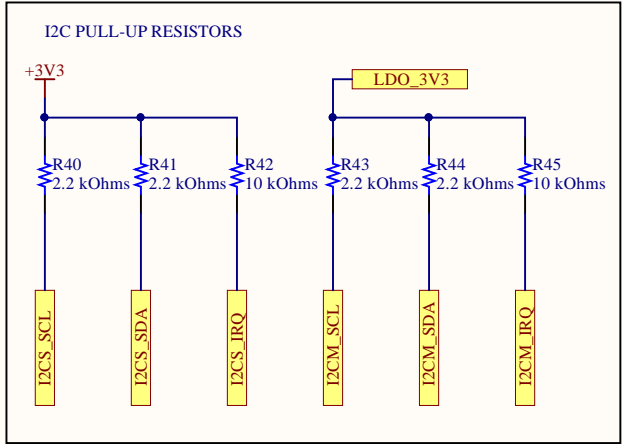
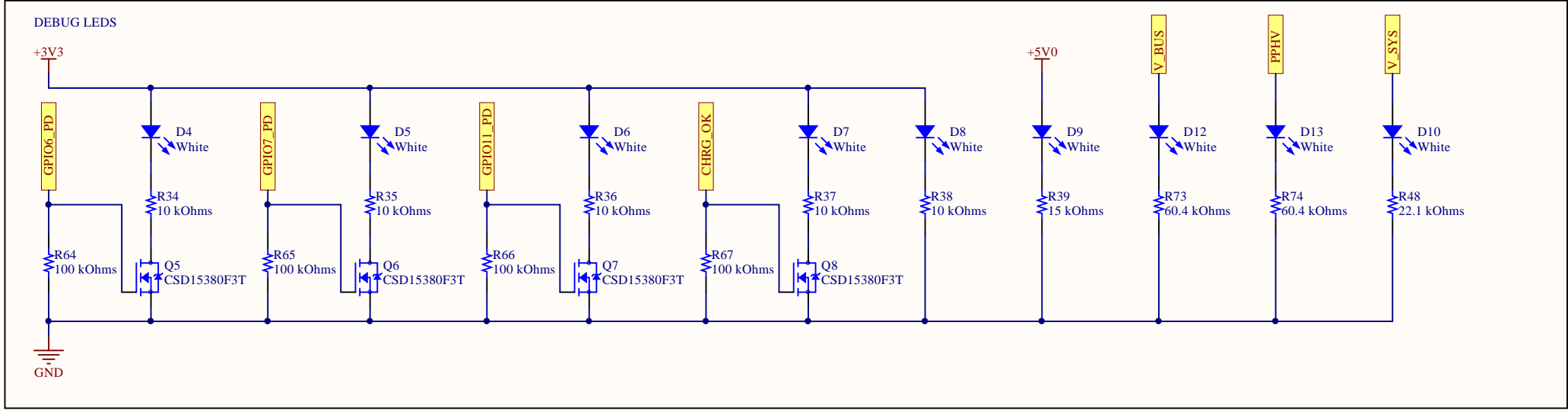
GPIO1\_PD



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A4		
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File:	C:\Users\...\Charging_TI.SchDoc	Drawn By:

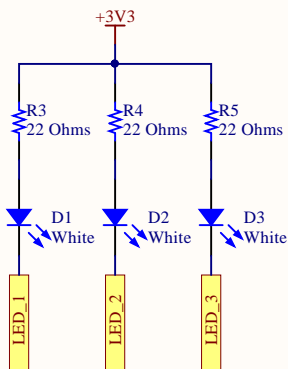


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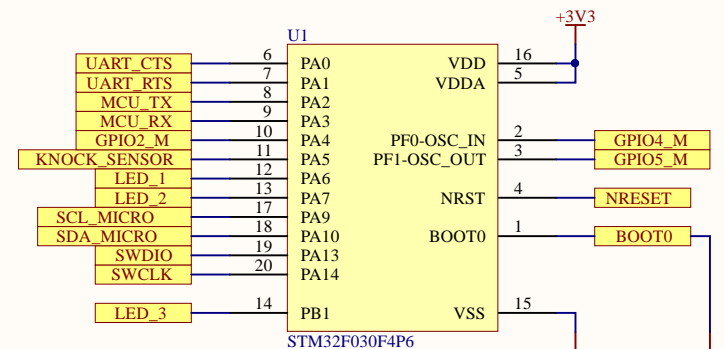
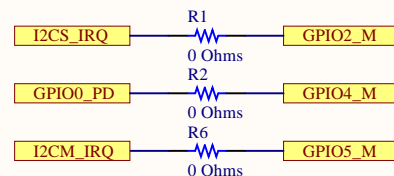
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A4		
Date:	7/06/2023	Sheet of
File:	C:\Users\...\I2C.SchDoc	Drawn By:

## LED OUTPUTS - MICRO

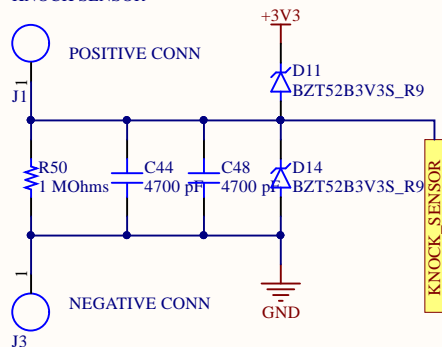


LP1  
LIGHT PIPE

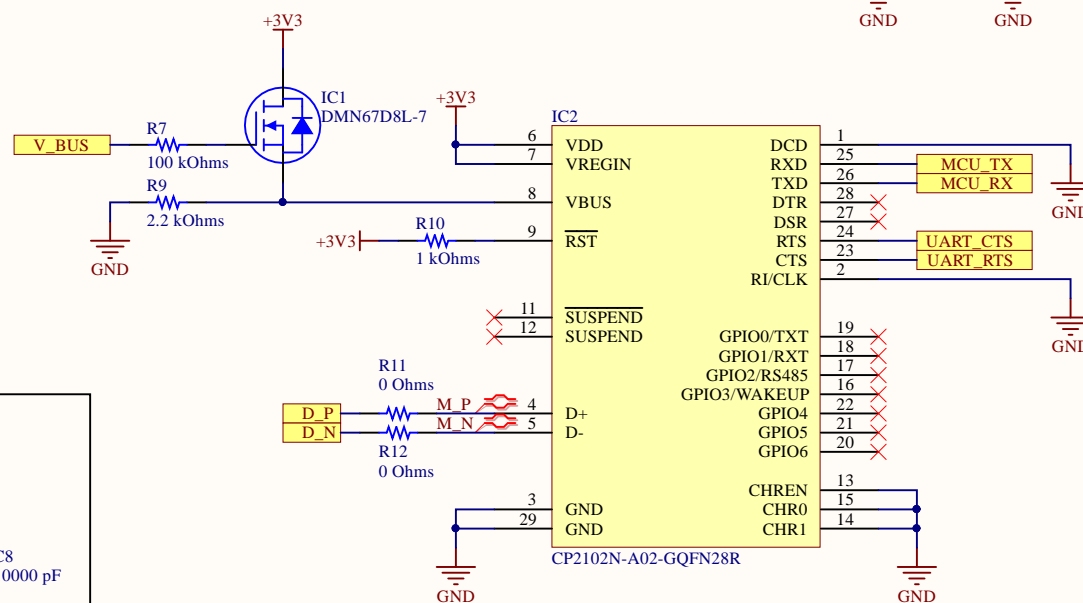
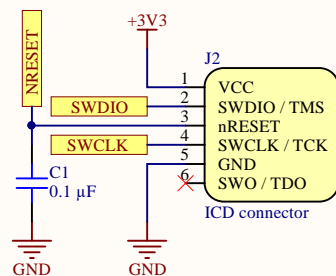
## PD TO MICRO GPIOs



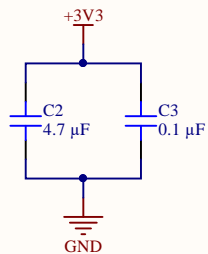
## KNOCK SENSOR



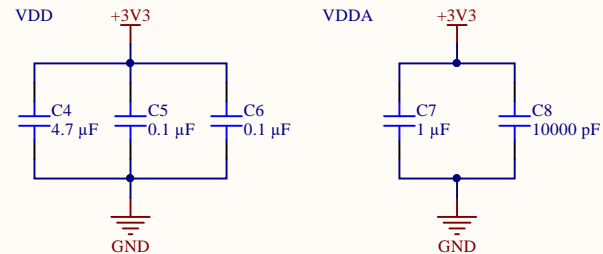
## TAG-CONNECT MICRO PROGRAMMER



## DECOUPLING CAPACITORS - FTDI

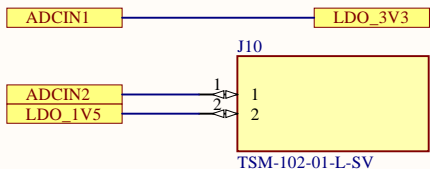


## DECOUPLING CAPACITORS - MICRO



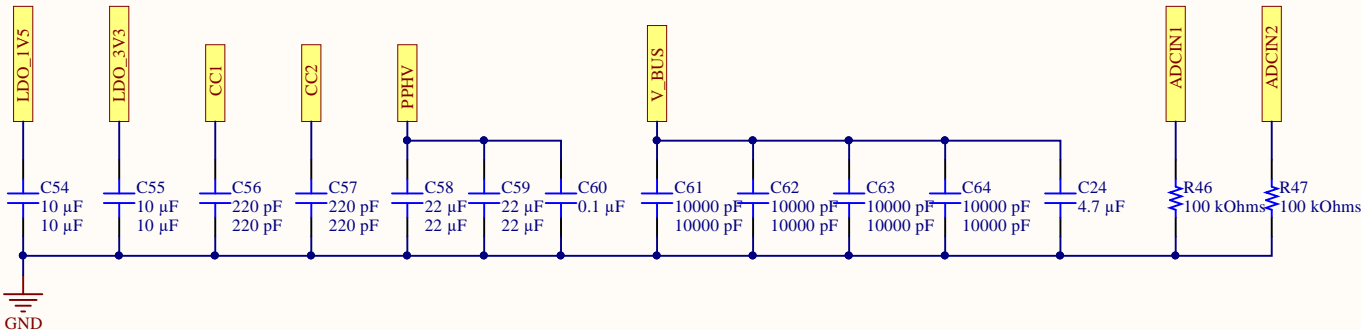
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DEAD BATTERY MODE SELECTION

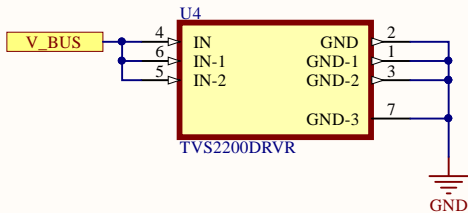


I2C SLAVE ADDRESS: 0100000b / 0x20  
CLOSED - ALWAYS ENABLE SINK (RECOMMENDED)  
OPENED - SAFE MODE

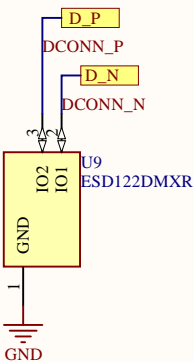
DECOUPLING CAPACITORS AND PASSIVES



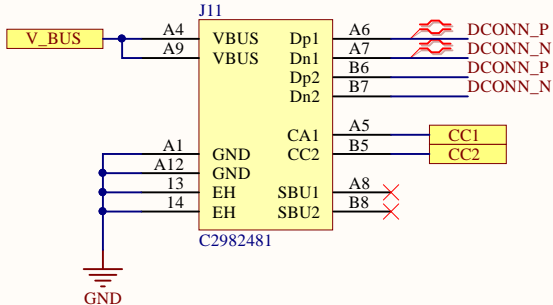
VBUS NEGATIVE VOLTAGE CLAMP



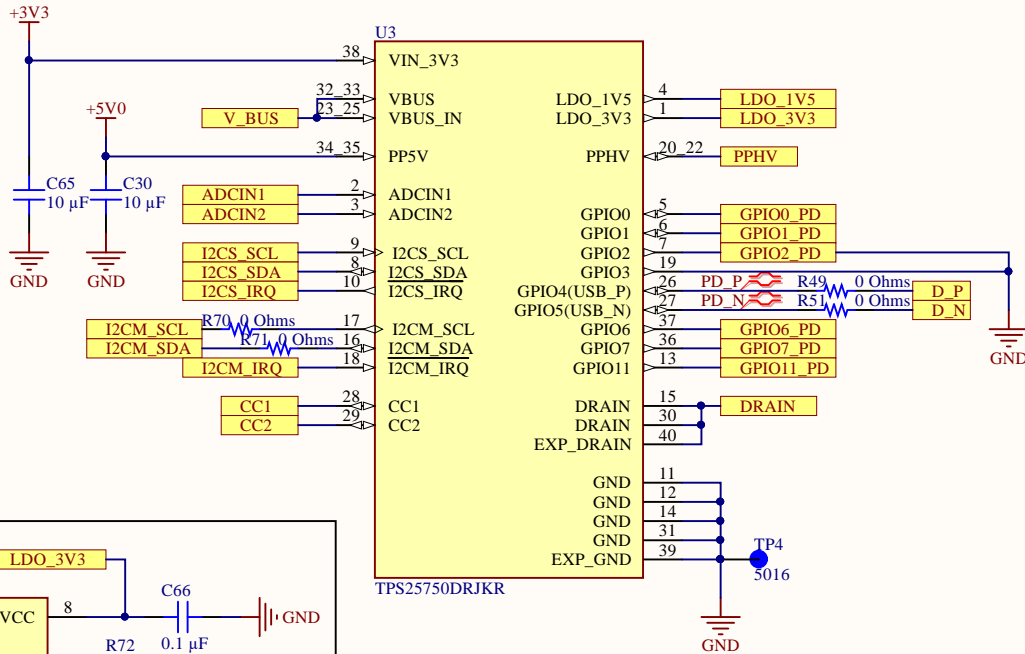
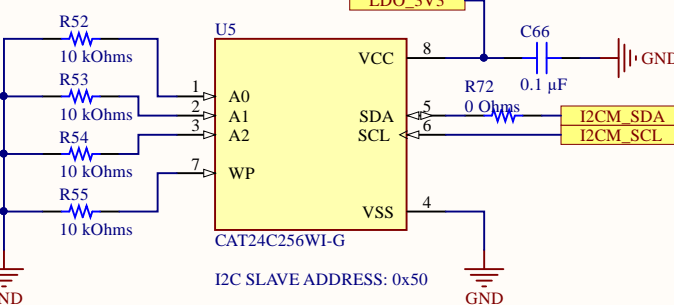
USB 2.0 LINE PROTECTION



USB-C CONNECTOR

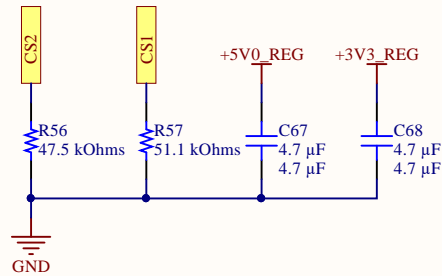


EEPROM FOR PD IC CONFIG

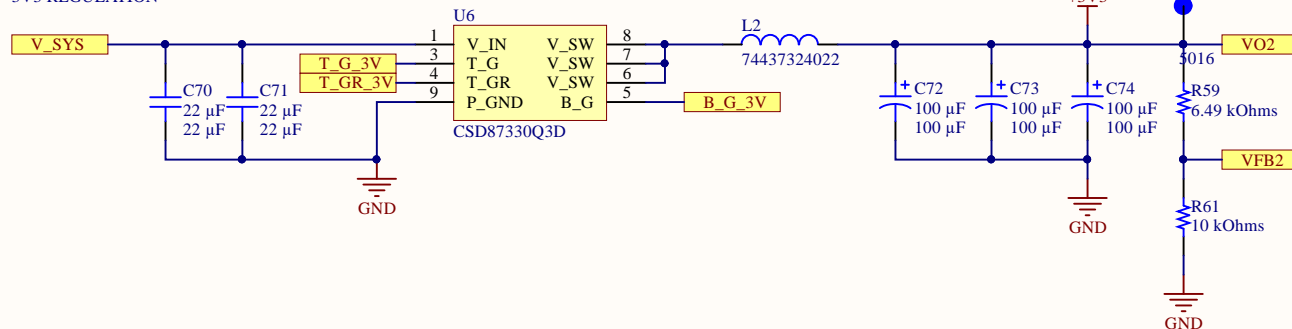


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Size	Number	Revision
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Date:	7/06/2023	Sheet of
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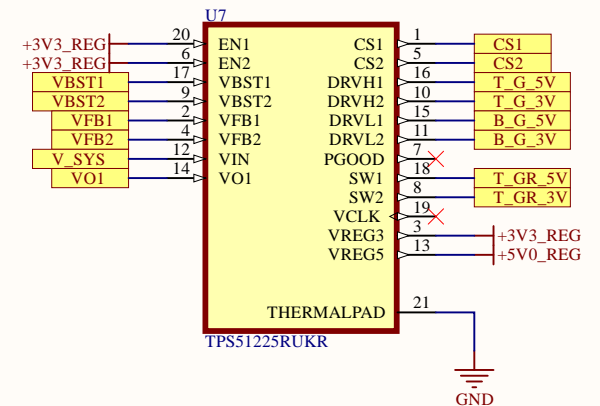
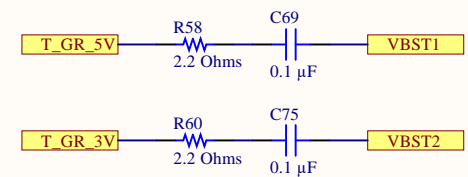
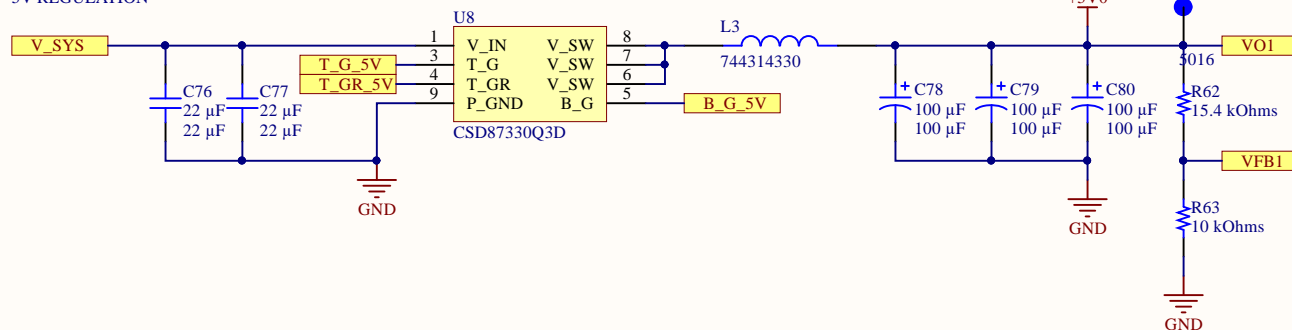
## DECOUPLING CAPACITORS



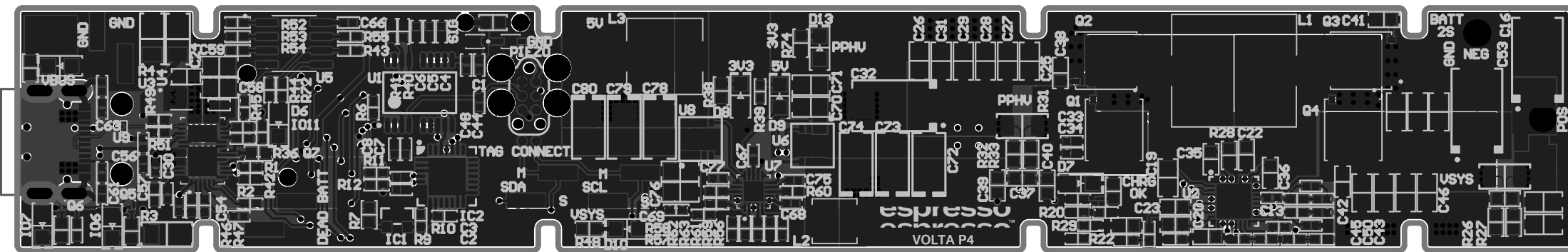
## 3V3 REGULATION



## 5V REGULATION



Title		
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A4		
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File:	C:\Users\...\Voltage_Regulation_TI.SchDoc	Drawn By:



Comment	Description	Designator	Footprint	LibRef	Quantity
0.1 µF	CAP CER 0.1UF 10V XSR 0402, CAP CER 0.1	C1, C3, C5, C6, C60, C6	CAP 0402 1005	LMK105B104MCF, B	8
4 µF	CAP CER 4.7UF 10V XSR 0402, CAP CER 4.7	C2, C4, C67, C68	CAP 0402 1005	CL05A475KPSNRNC, C	4
1 µF	CAP CER 1UF 10V XSR 0402, CAP CER 1UF	C7, C13	CAP 0402 1005	LMF105B105KPLF, E	2
10000 pF	CAP, MLC, 0402/1005, 10V, X7R, CAP C	C8, C34, C61, C62, C65	CAP 0402 1005	LMF105B7103XVHF, T	6
33 pF	CAP CER 33PF 50V CH 0402	C9	CAP 0402 1005	UMK105CH330JVHF	1
4700 pF	CAP CER 4700PF 50V X7R 0402	C10, C44, C48	CAP 0402 1005	0402B472J500CT	3
680 pF	CAP CER 680PF 50V NPO 0402	C11	CAP 0402 1005	C1005NP01H68J1050	1
15 pF	CAP CER 15PF 50V COG/NPO 0402	C12	CAP 0402 1005	CBR04C1505GAC	1
10 µF	CAP CER 10UF 50V XSR 0805	C14, C15, C25, C26, C2	CAP 0805 2012	GRM21B6R61H06KE4	15
33 µF	CAP TANT 33UF 20% 35V 2P17	C16, C32, C5	CAP POL 2917 7343	T495X336M05SA1E7	3
0.1 µF	CAP CER 0.1UF 50V X7R 0603	C17	CAP 0603 1608	CO603C104K5RAC741	1
100 pF	CAP CER 100PF 50V COG/NPO 0603	C18, C20, C21	CAP 0603 1608	CO603C101K5GAC74	3
0.27 µF	CAP CER 0.47UF 50V X7R 0805	C19	CAP 0805 2012	CO805C474K5RAC74	1
4.7 µF	CAP CER 2.2UF 35V XSR 0603	C22	CAP 0603 1608	GRM188R67A25KA1	1
1 µF	CAP CER 1UF 35V X7R 0603	C23	CAP 0603 1608	GMJ107CB7105KAHR	1
4.7 µF	CAP CER 4.7UF 35V XSR 0603	C24	CAP 0603 1608	C1608XSR1V475K08Q	1
10 µF	CAP CER 10UF 10V XSR 0402	C30, C54, C55, C65	CAP 0402 1005	CL05A106M8PN8UB8	4
1000 pF	CAP CER 1000PF 50V NPO 0402	C33	CAP 0402 1005	UMK105CG102JVHF	1
0.047 µF	CAP CER 0.047UF 25V X7R 0603	C35, C36	CAP 0603 1608	CO603C473K3RAC74	2
10000 pF	CAP CER 10000PF 50V NPO 0603	C37, C42	CAP 0603 1608	CGA3E2NP01H103J08	2
150 pF	CAP CER 150PF 50V COG/NPO 0603	C38, C41	CAP 0603 1608	CC0603P0909B1N5	2
0.033 µF	CAP CER 0.033UF 50V X7R 0603	C39, C40	CAP 0603 1608	CO603C33K3SRAC74	2
220 pF	CAP CER 220PF 16V X7R 0402	C56, C57	CAP 0402 1005	8.85012E+11	2
22 µF	CAP CER 22UF 35V XSR 0805	C58, C59, C70, C71, C7	CAP 0805 2012	C2012XSR1V226M125	6
100 µF	CAP TANT 100UF 20% 10V 1411	C72, C73, C74, C78, C7	CAP POL 1411 3528	ATCC-211E-010-107M	1
White	0805 LED WHITE, YELLOW DIFFUSED	D1, D2, D3, D4, D5, D6	LED 0805 2012	QBP631-1W5	12
BZT52B3V35_R9		D11, D14	DIO BZT52B3V35_R9	BZT52B3V35_R9	8
DMN67DBL-7	MOSFET N-CH 60V 210MA SOT23	IC1	DIODES SOT-23	DMN67DBL-7	1
CP2102N-042-GQFN12	IC USB TO UART BRIDGE QFN28	IC2	SILICON LABS QFN-28	CP2102N-042-GQFN12	1
TSM-102-01-L-SV		IS, J6, I7, J8, J10	TSM-102-01-L-SV	TSM-102-01-L-SV	5
C2982481	SA 1 Surface Mount 16 Female -55°C+8	J11	GT-USB-7079A	GT-USB-7079A	1
7443732402Z	LMH0ADY10100404R7MA1	J12	BMQADY10100404R7M	BMQADY10100404R7M	1
744314330	Inductor SMD 0.02 2.2uH 5 0A 27.0mΩ	L1	IND 7443732402Z	7443732402Z	1
	Inductor SMD 7050 3.3uH 9 A Wuerth El	L3	IND 744314330	744314330	1
LIGHT PIPE	Light Pipe Diallight 515-1069F	LP1	Diallight 515-1069F	Diallight 515-1069F	1
AON6362	30V N-Channel MOSFET	Q1, Q2, Q3, Q4	DFN 5x6	AON6362	4
CS015380F3T	20V N-Channel FemtoFET MOSFET 3-Pi	Q5, Q6, Q7, Q8	TRXDFN69X60035-3S	CS015380F3T	4
0 Ohms	RES SMD 0 OHM JUMPER 1/5W 0402	R1, R2, R6, R11, R12, R	RES 0402 1005	CRCW0402000020E0H	12
22 Ohms	RES SMD 22 OHM 0.5% 1W 1206	R3, R4, R5	RES 1206 3216	HRG31206-02, 22R0-D-T	3
100 kOhms	RES 100K OHM 0.5% 1/16W 0402	R7	RES 0603 1608	RNC50603BKE100K	1
2.2 kOhms	RES 2.2K OHM 0.1% 1/10W 0402, RES 2.2	R9, R40, R41, R43, R44	RES 0402 1005	TNPW04022220BYEP, E	5
1 kOhms	RES SMD 1K OHM 5% 1/16W 0402	R10	RES 0402 1005	AF0402JR-071KL	1
150 kOhms	RES 150K OHM 5% 1/16W 0402	R13	RES 0402 1005	RC0402JR-07150KL	1
100 kOhms	RES SMD 100K OHM 1% 1/16W 0402	R14, R46, R47, R64, R6	RES 0402 1005	RT0402FRE07100KL	7
300 kOhms	RES 300K OHM 5% 1/16W 0402	R15	RES 0402 1005	RC0402FR-07300KL	1
2 MOhms	RES 2M OHM 5% 1/16W 0402	R16	RES 0402 1005	RMCF0402I27M00KL	1
10 kOhms	RES 10K OHM 5% 1/16W 0402	R17, R20, R21, R22, R	RES 0402 1005	RC0402JR-1310KL	12
40.2 kOhms	RES 40.2K OHM 1% 1/16W 0402	R18	RES 0402 1005	RC0402FR-07402KL	2
15 kOhms	RES 15K OHM 1% 1/16W 0402	R19, R39	RES 0402 1005	RC0402FR-1315KL	2
383 kOhms	RES SMD 383K OHM 1% 1/10W 0402	R23	RES 0402 1005	ERJ-2RKF3833X	1
5 mOhms	RES 0.005 OHM 5% 1W 1206	R24, R31	RES 1206 3216	PM18E2RPUJ50L	1
220 kOhms	RES 220K OHM 5% 1/16W 0402	R25	RES 0402 1005	RC0402FR-07220KL	1
10 Ohms	RES SMD 10 OHM 1% 1/10W 0603	R26, R27, R28	RES 0603 1608	ERJ-3EKF10R0V	3
30.1 kOhms	RES 30.1K OHM 1% 1/16W 0402	R29	RES 0402 1005	RC0402FR-07301KL	1
191 kOhms	RES SMD 191K OHM 1% 1/10W 0402	R30	RES 0402 1005	ERJ-2RKF1913X	1
4.99 Ohms	RES 4.99 OHM 5% 1/10W 0603	R32, R33	RES 0603 1608	RC0603FR-07499RL	2
10 kOhms	RES 10K OHM 5% 0.01W 0603	R34, R35, R36, R37, R	RES 0603 1608	CR0603J-1W-103AES	5
22.1 kOhms	RES 22.1K OHM 1% 1/10W 0603	R38	RES 0603 1608	RMCF0603F7221KL	1
1 MOhms	RES SMD 1M OHM 0.1% 1/10W 0603	R40	RES 0603 1608	RT0603BRD071M3L	1
47.5 kOhms	RES 47.5K OHM 5% 1/16W 0402	R56	RES 0402 1005	RC0402FR-07475KL	1
51.1 kOhms	RES SMD 51.1K OHM 1% 1/16W 0402	R57	RES 0402 1005	RC0402-FX-51126LF	1
2.2 Ohms	RES 2.2 OHM 5% 1/16W 0402	R58, R60	RES 0402 1005	RC0402JR-072R2KL	1
6.49 kOhms	RES 6.49K OHM 5% 1/16W 0402	R59	RES 0402 1005	RC0402FR-076K49L	1
15.4 kOhms	RES 15.4K OHM 1% 1/16W 0402	R62	RES 0402 1005	RC0402FR-0715K4L	1
60.4 kOhms	RES SMD 60.4K OHM 1% 1/10W 0603	R73, R74	RES 0603 1608	CRCW060360K4FKEA	2
5016		TP1, TP2, TP3, TP4, TP	KEYSTONE 5016	5016	6
STM32F303F4P6	Value-line Arm-based 32-bit MCU with u	U1	TSP05P640X120-20	STM32F303F4P6	1
BQ25731RSNR	I2C 1- to 5-Cell Buck-Boost Battery Char	U2	QFN40P400X400X80	BQ25731RSNR	1
TPS2750DRJRK	USB, Type-C Controller PMIC 38-WQFN (U	U3	IC TPS2750DRJRK	TPS2750DRJRK	1
TVS2200DRVR		U4	SON6P5200X200X80	TVS2200DRVR	1
CAT24C256WVI-G	EEPROM Memory IC 256Kb (32K x 8) 1A	U5	SOIC127P600X175-8N	CAT24C256WVI-G	1
CS87333QOQ3D	Synchronous Buck NexFET™ Power Buck	U6, U8	Q3D	CSD87333QOQ3D	2
TPS51225RUKR		U7	QFN40P300X300X80	TPS51225RUKR	1
ESD122DMXR	2-channel ESD protection diode for USB	U9	IC ESD122DMXR	ESD122DMXR	1