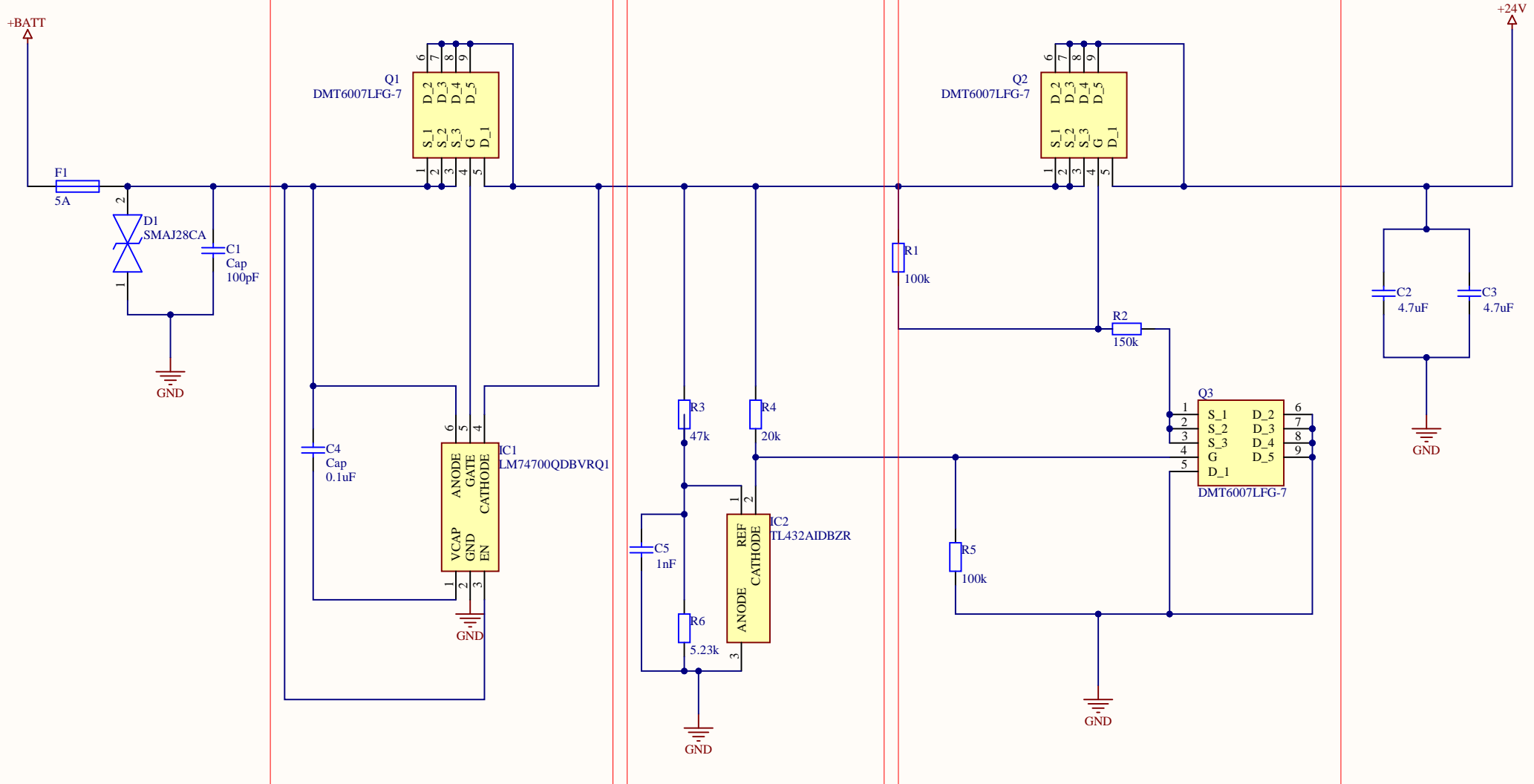


Title		
Elekid		
Size	Number	Revision
A4		
Date:	9-13-2020	Sheet of
File:	C:\Users\...\Elekid.SchDoc	Drawn By:

Reverse Polarity Protector

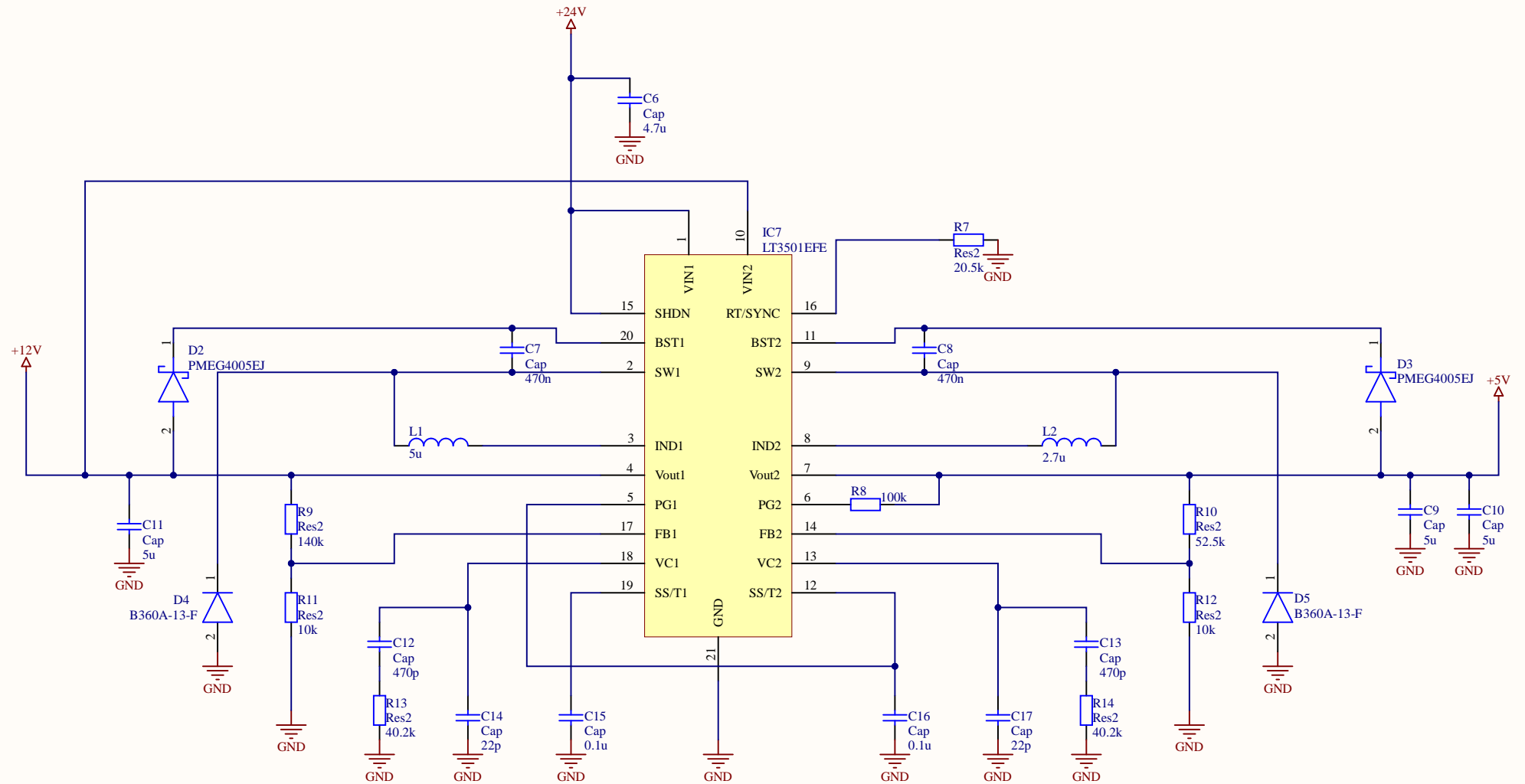
Precision 25V Shunt

Fast Response Series Regulation



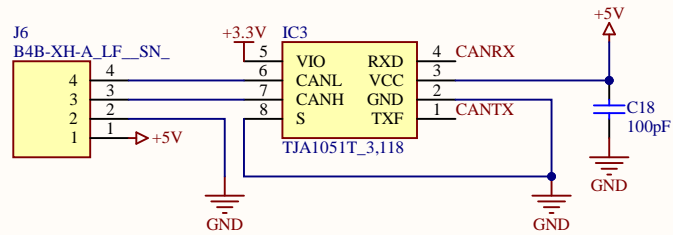
Title		
Size	Number	Revision
A4		
Date:	9-13-2020	Sheet of
File:	C:\Users\...\Elekid_01.SchDoc	Drawn By:

# Buck Conversion

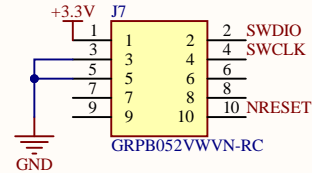


Title		
Size	Number	Revision
A4		
Date:	9-13-2020	Sheet of
File:	C:\Users\...\Elekid_02.SchDoc	Drawn By:

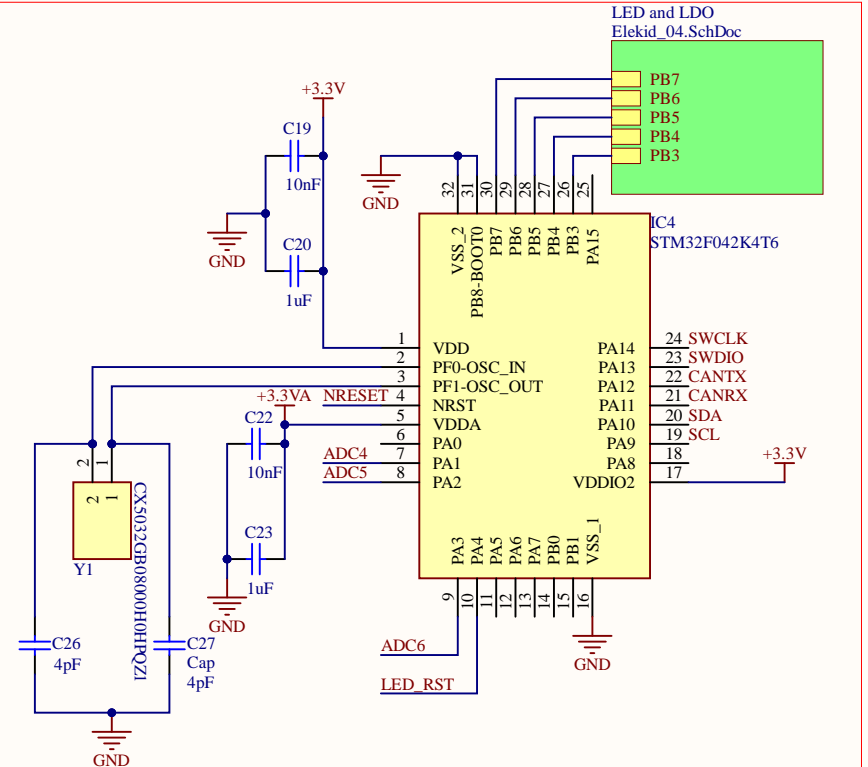
## CAN Transceiver



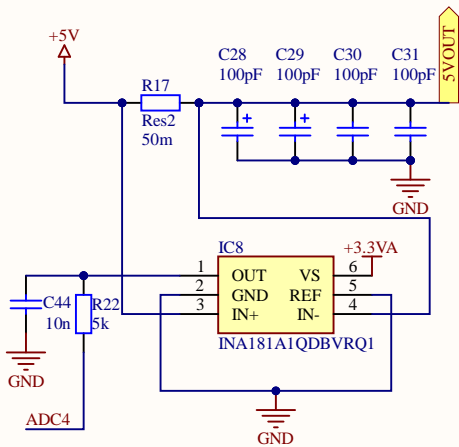
## Programming Header



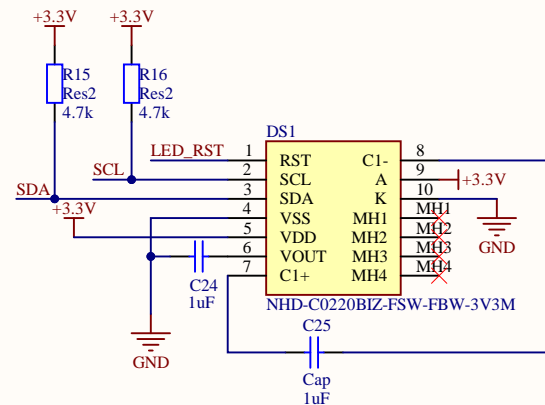
## Microcontroller



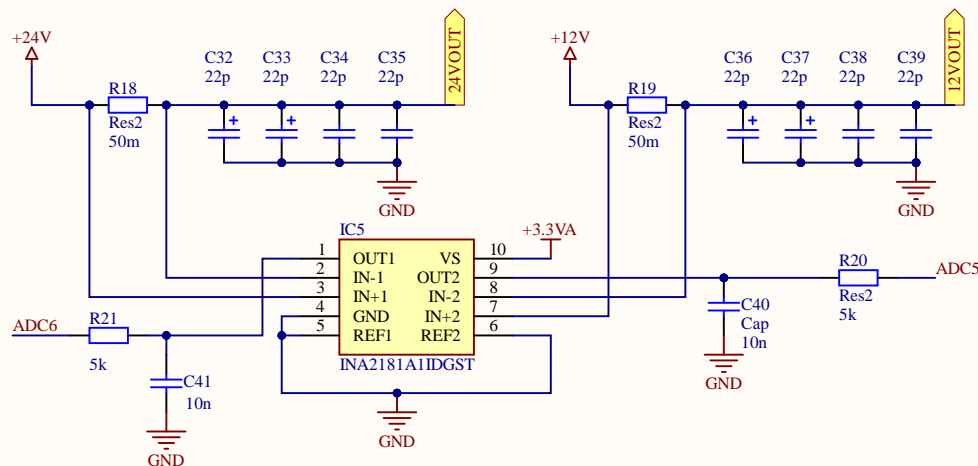
## 5V Current Sense and Output



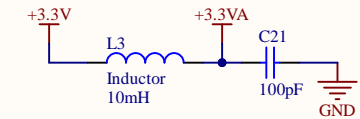
## I2C LCD Breakout



## 12V and 24V Current Sense and Output

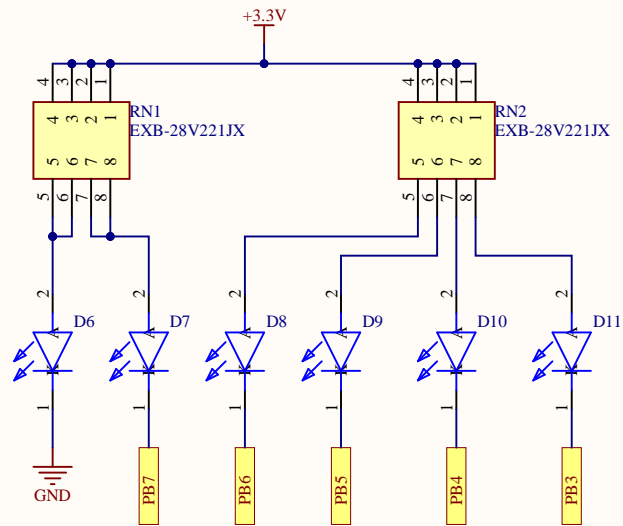


## Analog Power Decoupling

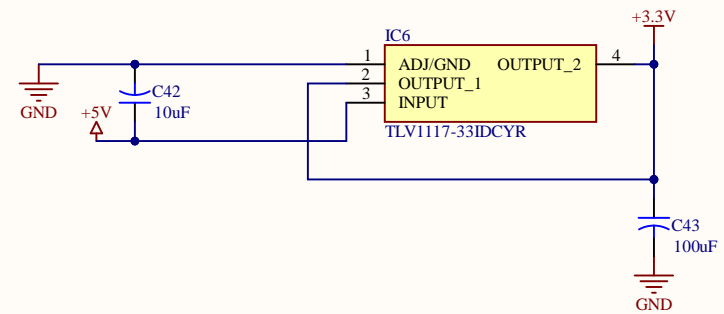


Title		
Size	Number	Revision
A4		
Date:	9-13-2020	Sheet of
File:	C:\Users\...\Elekid_03.SchDoc	Drawn By:

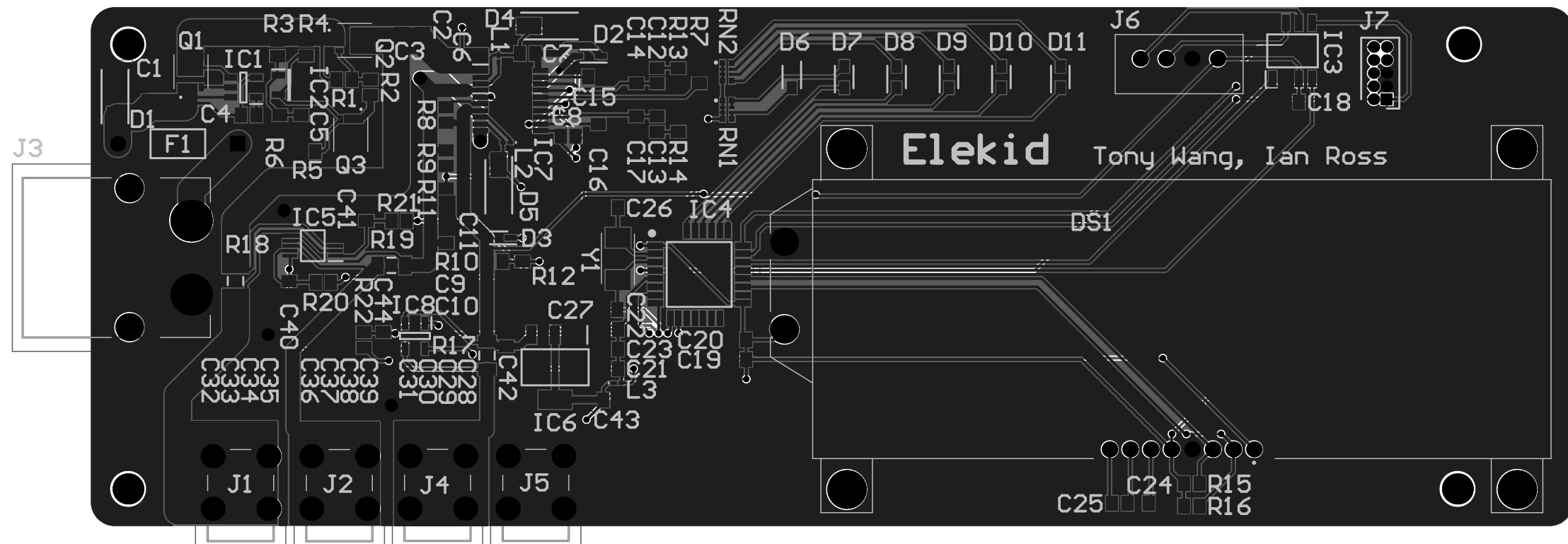
## LEDs



## LDO



Title		
Size	Number	Revision
A4		
Date:	9-13-2020	Sheet of
File:	C:\Users\...\Elekid_04.SchDoc	Drawn By:



Comment	Description	Designator	Footprint	LibRef	Quantity
Cap	Capacitor	C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24, C25, C26, C27, C30, C31, C34, C35, C38, C39, C40, C41, C44	C0805	Cap	36
Cap Pol2	Polarized Capacitor (Axial)	C28, C29, C32, C33, C36, C37	C0805	Cap Pol2	6
Cap2	Capacitor	C42, C43	C0805	Cap2	2
SMAJ28CA	TVS Diode (Bi-directional)	D1	DIONM5226X262N	SMAJ28CA	1
PMEG4005EJ	Schottky Diode	D2, D3	SOD2512X80N	PMEG4005EJ	2
B360A-13-F	Diode	D4, D5	DIOM5226X240N	B360A-13-F	2
LD_MVSG-JGLH-46-1	LED	D6, D7, D8, D9, D10, D11	LEDM2218X140N	LD_MVSG-JGLH-46-1	6
NHD-C0220BIZ-FSW-FBW-3V3M	Display	DS1	NHDC0220BIZFSWFBW3V3M	NHD-C0220BIZ-FSW-FBW-3V3M	1
5A	Fuse	F1	PIN-W2/E2.8	Fuse 1	1
LM74700QDBVRQ1	Integrated Circuit	IC1	SOT95P280X145-6N	LM74700QDBVRQ1	1
TL432AIDBZR	Integrated Circuit	IC2	SOT95P237X112-3N	TL432AIDBZR	1
TJA1051T_3,118	Integrated Circuit	IC3	SOIC127P600X175-8N	TJA1051T_3,118	1
STM32F042K4T6	Integrated Circuit	IC4	QFP80P900X900X160-32N	STM32F042K4T6	1
INA2181A1IDGST	Integrated Circuit	IC5	SOP50P490X110-10N	INA2181A4IDGST	1
TLV1117-33IDCYR	Integrated Circuit	IC6	SOT230P700X180-4N	TLV1117-33CDCYR	1
LT3501EFE		IC7	SOP65P640X120-21N	LT3501EFE	1
INA181A1QDBVRQ1	Integrated Circuit	IC8	SOT95P280X145-6N	INA181A1QDBVRQ1	1
7774	Connector	J1, J2, J4, J5	7774	7774	4
XT60PW-M	Connector	J3	XT60PWM	XT60PW-M	1
B4B-XH-A_LF__SN_	Connector	J6	B4BXHALFSN	B4B-XH-A_LF__SN_	1
GRPB052VWVN-RC	Connector	J7	HDRV10W50P127_2X5_635X340X430P	GRPB052VWVN-RC	1
Inductor	Inductor	L1, L2, L3	0603	Inductor	3
DMT6007LFG-7	MOSFET (N-Channel)	Q1, Q2, Q3	DMT6007LFG7	DMT6007LFG-7	3
Res2	Resistor	R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R20, R21, R22	C0805	Res2	19
Res2	Resistor	R17, R18, R19	C1206	Res2	3
EXB-28V221JX	Resistor Network	RN1, RN2	EXB28V510JX	EXB-28V221JX	2
CX5032GB08000H0HP QZ1	Crystal or Oscillator	Y1	CX5032GB08000H0HP QZ1	CX5032GB08000H0HP QZ1	1