

Title		
Size	Number	Revision
A4		
Date:	7.20.2021	Sheet of
File:	C:\Users\...\arm_board.SchDoc	Drawn By:

1

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3

4

SHIELD  
GND  
ID  
D+  
D-  
VBUS

P2

3V3\_MCU

J1

VBUS\_PW

IC1Q

USB0\_VSSA\_TERM  
USB0\_VSSA\_REF  
USB0\_RREF  
USB0\_ID  
USB1\_DP  
USB1\_DM  
USB0\_DP  
USB0\_DM  
USB0\_VBUS  
USB0\_VDDA3V3\_DRIVER  
USB0\_VDDA3V3

R1

12.1 kOhms

P24

P24

P89

P90

P18

P20

P21

P16

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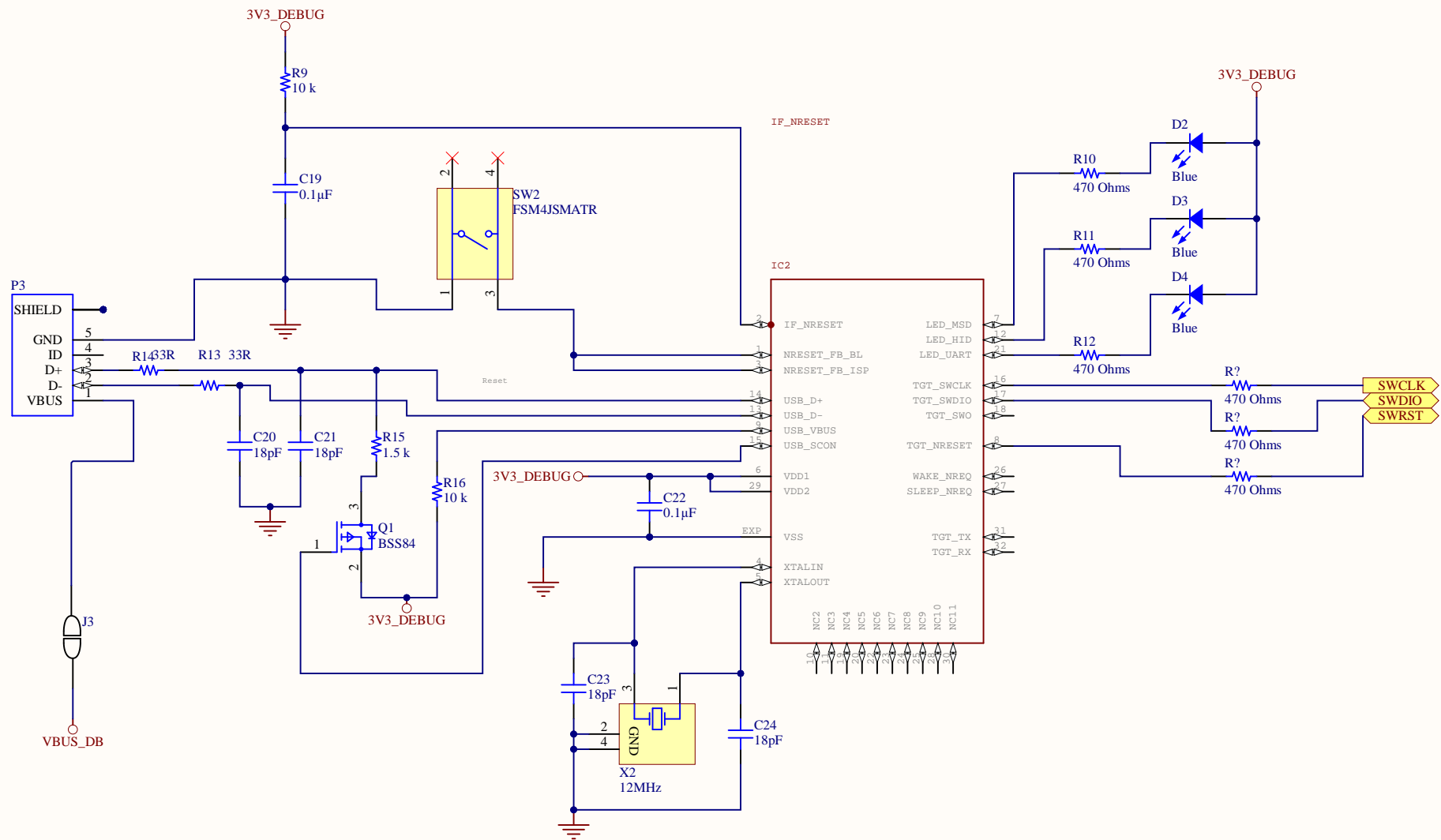
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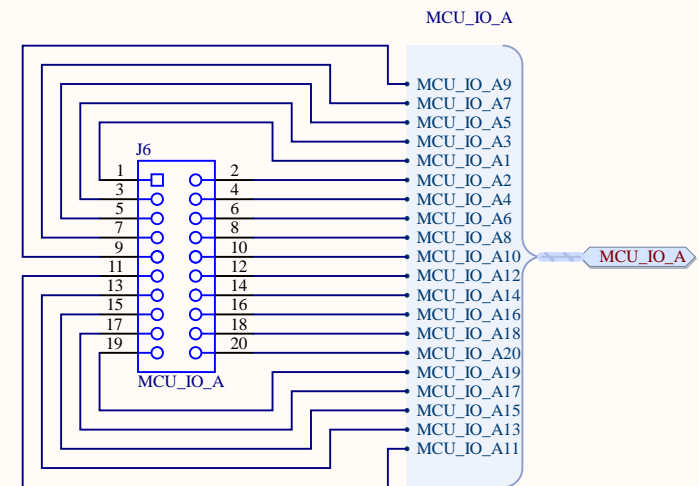
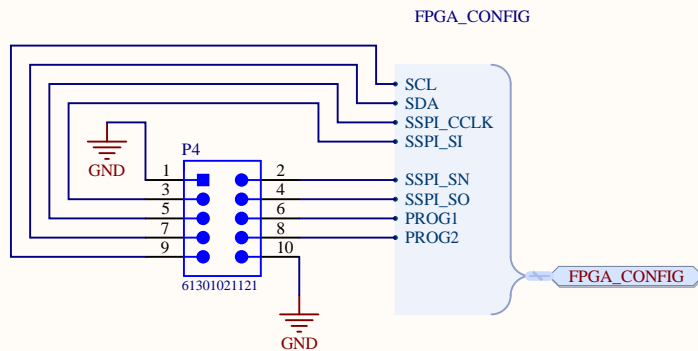
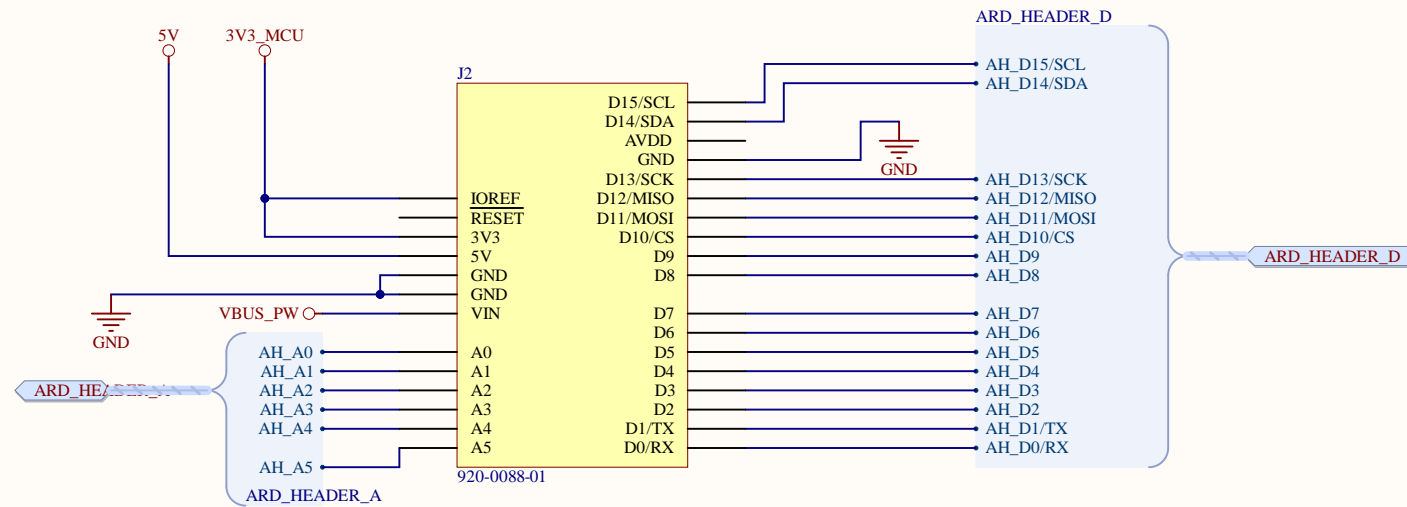
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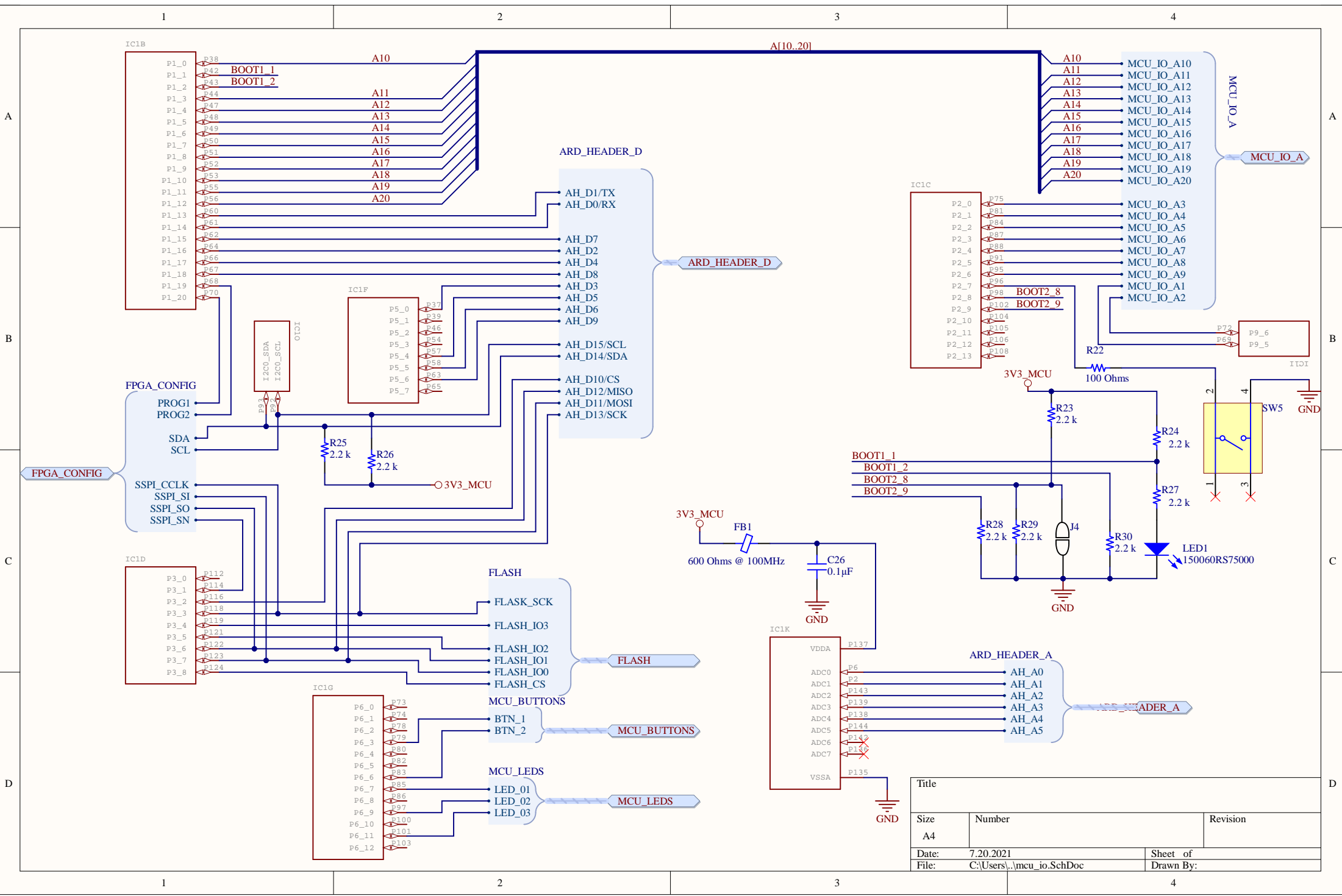
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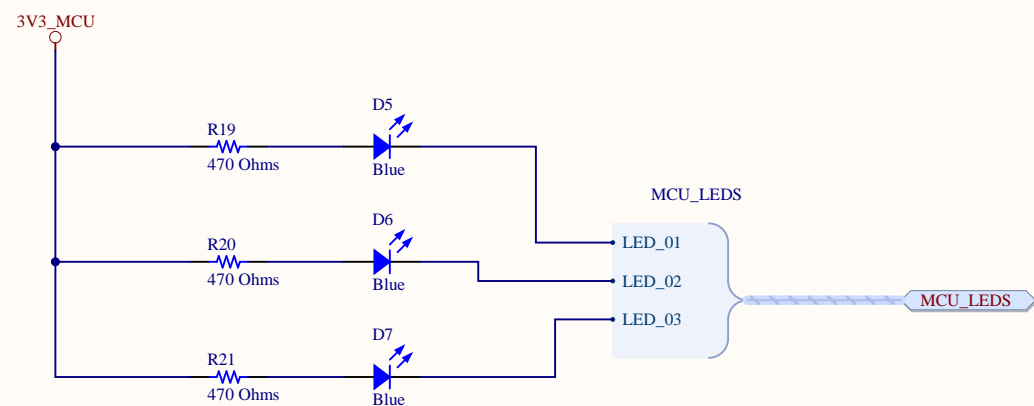
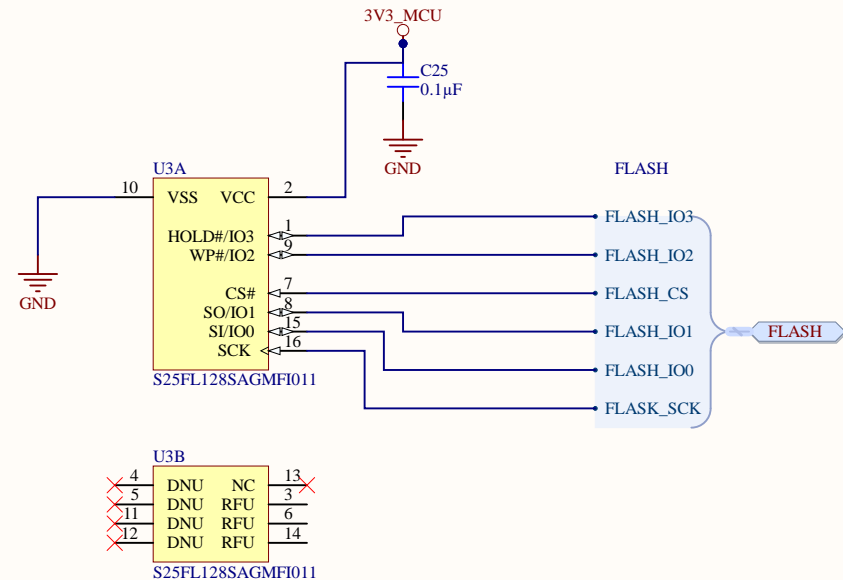
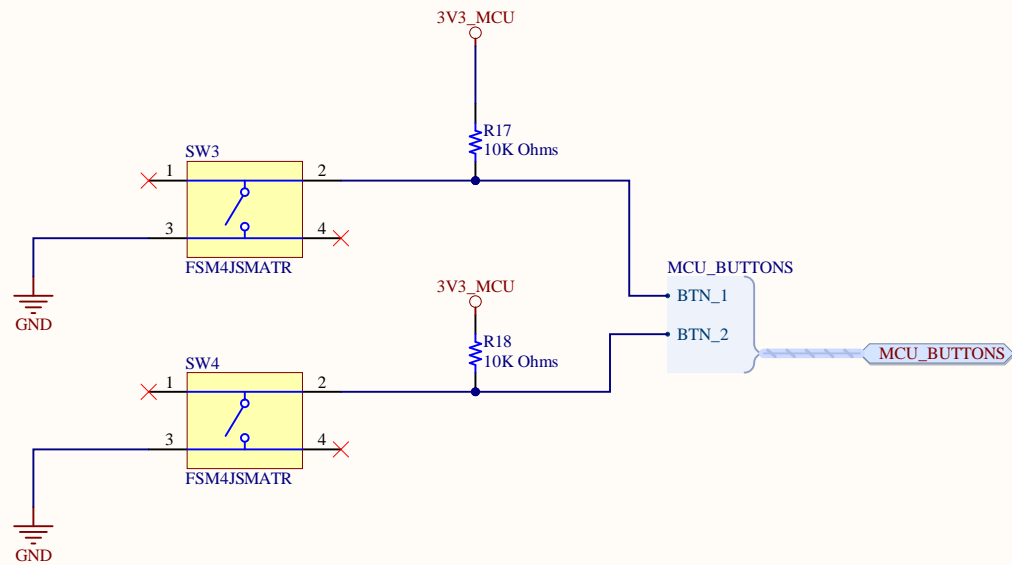
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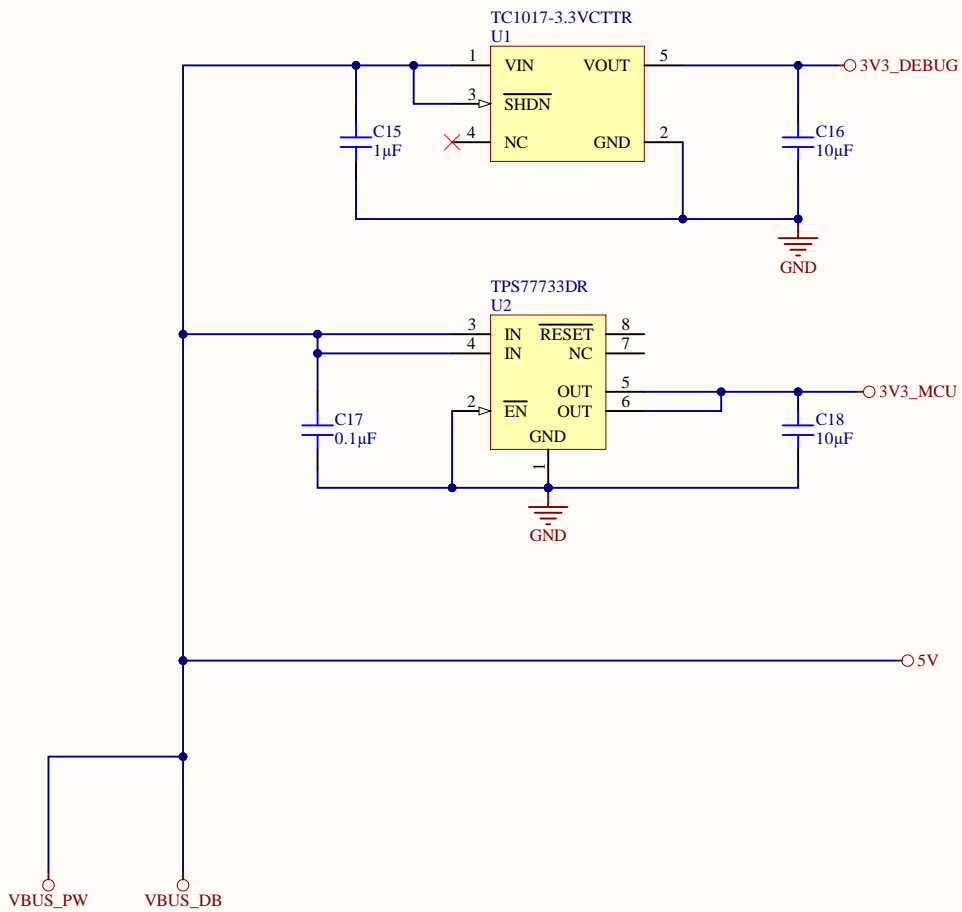
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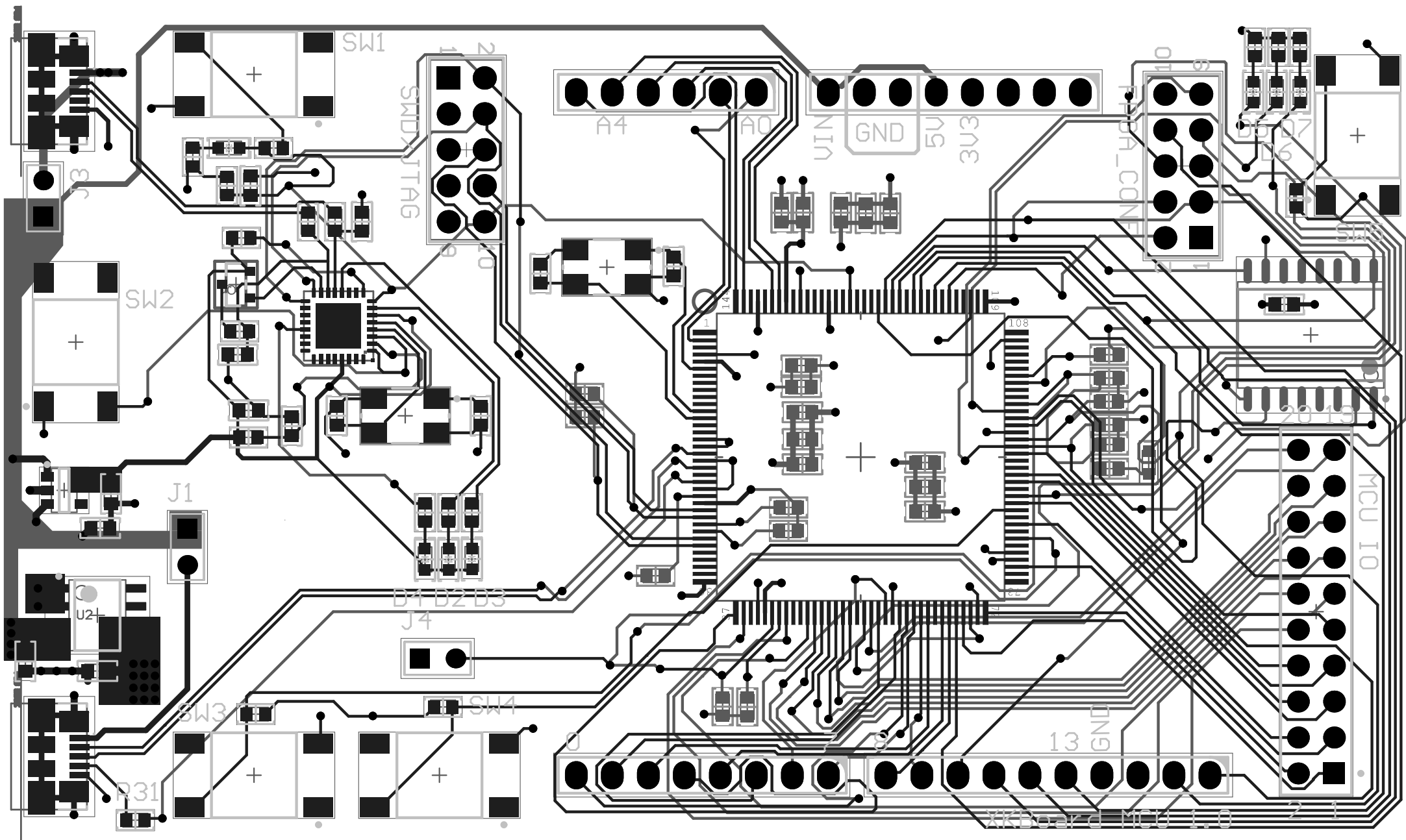
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Comment	Description	Designator	Footprint	RefBof	Quantity
10µF	CAP CER 10µF 10V X5R 0603, CAP CER 10µF 16V X5R 0603	C1, C16, C18	CAP 0603_1608	GRM188R61A106MAA LD, GR1188R61C106KE13 D	3
4.7µF	CAP CER 4.7µF 10V X5R 0603	C2, C4, C10	CAP 0603_1608	LMK1078M75KA-T	3
1µF	CAP CER 180F 10V OG/NPO 0603	C3, C7, C20, C21, C23, C24	CAP 0603_1608	NX603A180F10C0W18 C	6
0.1µF	CAP CER 0.1µF 50V X7R 0603, CAP CER 0.1µF 10V X7R 0603, CAP CER 0.1µF 16V X7R 0603	C5, C9, C11, C12, C14, C17, C19, C22, C25, C26	CAP 0603_1608	C0603C104K5RAC7411 + C0603T104K5RAC7863 +C0603K5X7C78B104	10
0.01µF	CAP CER 0.01µF 250V X7R 0603	C6, C8, C13	CAP 0603_1608	C0603C103KARACAUT O	3
1µF	CAP CER 0603 1µF 16V X7R 20%	C15	CAP 0603_1608	C0603X105MARACAU TD	1
Blue	LED BLUE 0603 SMD	D1, D2, D3, D4, D5, D6, D7	LED 0603_1608 BLUE	VLW1300-G508	1
400 Ohms @ 100MHz	FERDITE READ 400 OHM 0603 1LN	FB1	FER 0603_1608	BLM18AG6015N1D	1
	LQFP144: SOT486-1 LQFP144: plastic low profile quad flat package- 144 leads: body 20 x 20 x 1.4 mm body + leads 22 x 22 mm Solderland (pads) 0.4 x 1.5 mm on corners (8 x) and 0.28 x 1.5 mm (136 x)	IC1	LQFP144	LPC4300_LQFP144	1
	CMX55: CAP interface 32 bit LPC11100 ARM Cortex M3 RISC 64KB Flash 2.5V/3.3V 33-Pin HVQFN EP	IC2	HVQFN33	IF_PC11U35FH03/50 1	1
103185-2	02 MO08 HDR SRST B/A, 100CL	J1, J3, J4	TE_103185-2	103185-2	3
920-0088-01	CONWR HDR 010P 0.1 GOLD PCB 6PC	J2	SCHWABTBOARD - 920-0088-01	920-0088-01	1
MCU_IO_A	Female Header, Pitch 2.54 mm, 2 x 10 Position, Height 8.75 mm, Tail Length 3.2 mm, 40 to 105 degC, RoHS, Bulk	J6	SUN_PPFC102LFBN- RC_V	CMP-1770-00003-1	1
110060RS710000	SMD mono-color Chip LED, WL-SMOW, Red	LED1	0603_A	CMP-1426-00001-1	1
A1301021121	THST Vertical Pin Header WR-PHD, Pitch 2.54 mm, Dual Row, 10 pins	P1, P4	A1301021121	CMP-1502-01084-1	2
47346-0001	CONN RCPT SPOS MICRO USB A/A, SMD	P2, P3	MOLEX_47346-0001	47346-0001	2
B5584	MOSFET P-CH 50V 130MA SOT-23	Q1	FP-SOT23-MFG	CMP-14409-000006-1	1
12 1kOhms	RES SMD 12 1K OHM 1% 1/10W 0603	R1, R4, R5	RES 0603_1608	CR0603-FX-1212ELF	3
10k	RES 10K OHM 0.1% 1/10W 0603	R2, R3, R9, R16	RES 0603_1608	RNC50603BKE10K0	4
10 Ohms	RES SMD 10 OHM 0.1% 1/10W 0603	R6	RES 0603_1608	CRT0603-BY-10R0ELF	1
100k	RES 100K OHM 5% 1/10W 0603	R7	RES 0603_1608	RNCF0603T100K	1
100 Ohms	RES 100 OHM 0.1% 1/16W 0603	R8, R22	RES 0603_1608	RNC50603BKE100R	2
470 Ohms	RES SMD 470 OHM 5% 1/10W 0603	R10, R11, R12, R19, R20, R21, R7	RES 0603_1608	CRCV0603470R0NEA HP	6
33R	RES SMD 33 OHM 0.1% 1/16W 0603	R13, R14	RES 0603_1608	CPF0603B33RE	2
1.5 k	CRCP 0603 1K5 1% 1/8W 0603	R15, R18	RES 0603_1608	CRCP0603T1K5	3
10K Ohms	RES SMD 470 OHM 5% 1/8W 0603	R17, R18	RES 0603_1608	CRCV0603470R0NEA HP	2
2.2k	RES SMD 2.2K OHM 1% 1/10W 0603, RES 2.2K OHM 5% 1/10W 0603	R23, R24, R25, R26, R27, R28, R29, R30	RES 0603_1608	ERJ-30KF220V, BK7381UTD222J	8
Value	RES 0 OHM JUMPER 0603	R31	RES 0603_1608	TLRZ1UTD	1
F3M4J5MATR - RESET	Micro Miniature Push Button Switch FSM J5M, 50 mA, -35 to 85 degC, 4-Pin SMD, RoHS, Tape and Reel	SW1	TECO- F3M4J5MATR_V	CMP-2000-07486-1	1
F3M4J5MATR	Micro Miniature Push Button Switch FSM J5M, 50 mA, -35 to 85 degC, 4-Pin SMD, RoHS, Tape and Reel	SW2, SW3, SW4, SW5	TECO- F3M4J5MATR_V	CMP-2000-07486-1	4
TC1017-3.3VCTTR	150-mA, Tiny CMOS LDO with Shutdown, 5-Pin SOT-23, Extended Temperature, Tape and Reel	U1	SOT-23 CTS_L	CMP-0136-00743-1	1
TP577733DR	Single Output Fast Transient Response LDO, 750mA, Fixed 3.3V Output, 2.7 to 10 V Input, 8-pin SMD (D), -40 to 125-degC, Green (RoHS & no Pb/Bi)	U2	D0008A_N	CMP-0395-00062-2	1
S25FL128SAGM011	MirrorBit Flash Non- Volatile Memory 5VMS 3.0Vtt Core with Versatile I/O, Serial Peripheral Interface with Multi- I/O, 128 Mbit, 133 MHz, -40 to 85 degC, 16-Pin SO (SO3016), RoHS, Tube	U3	SPSN-SOIC-16_L	CMP-1129-00018-1	1
25MHz	Ceramic Surface Mount Low Profile Quartz Crystal, 8 MHz, -20 to 70 degC, 4-Pin 6 x 3.6 x 1.2 mm SMD, RoHS, 1000pcs / Reel	X1	ABRA-ABRMJ0-4_V	CMP-0277-00003-1	1
12MHz	Ceramic Surface Mount Low Profile Quartz Crystal, 8 MHz, -20 to 70 degC, 4-Pin 6 x 3.6 x 1.2 mm SMD, RoHS, 1000pcs / Reel	X2	ABRA-ABRMJ0-4_V	CMP-0277-00003-1	1