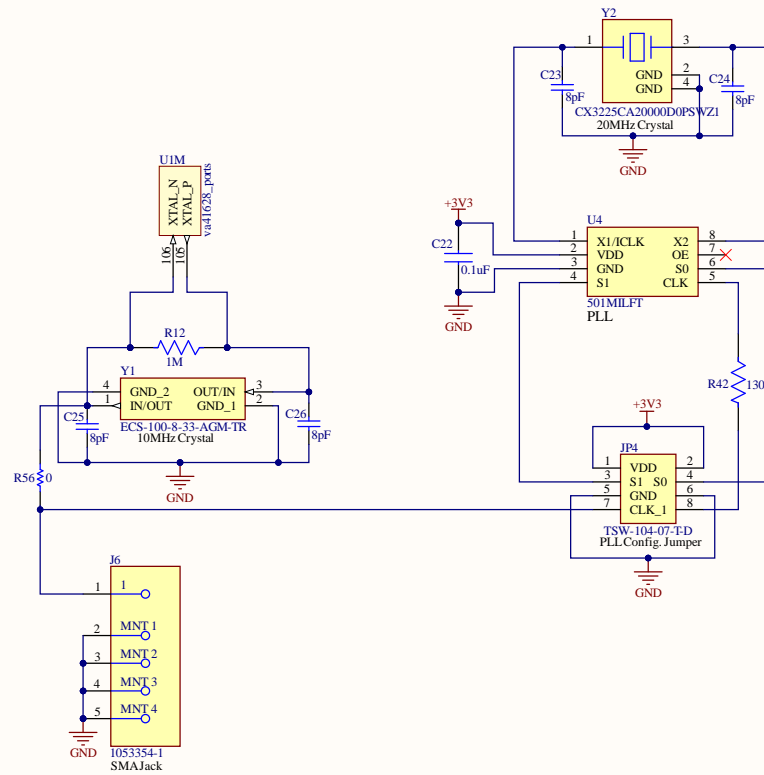


Title <b>Polaris Evaluation Board (PEB2)</b>			
Size B	Number <b>VA41628-EVK</b>		Revision <b>C</b>
Date:	8/16/2024	Sheet of	1 of 6
File:	C:\Users\...\Power.SchDoc	Drawn By:	JMH

# PLL, Crystals, & Clock



Title		
Polaris Evaluation Board (PEB2)		
Size	Number	Revision
B	VA41628-EVK	C
Date:	8/16/2024	Sheet of 2 of 6
File:	C:\Users\...\PLL.SchDoc	Drawn By: JMH







**I2C Pull-up Jumper**

Off page connectors  
Connected by net name to JP6

U11

U1K

va41628\_ports

va41628\_ports

va41628\_ports

Header 6x2

R5 2.2K

R6 2.2K

R7 2.2K

R8 2.2K

R9 2.2K

R10 2.2K

+3V3

I2C0

I2C1

I2C2

SCL

SDA

I2C0\_SCL

I2C0\_SDA

I2C1\_SCL

I2C1\_SDA

I2C2\_SCL

I2C2\_SDA

122

121

65

66

63

64

1

2

3

4

5

6

7

8

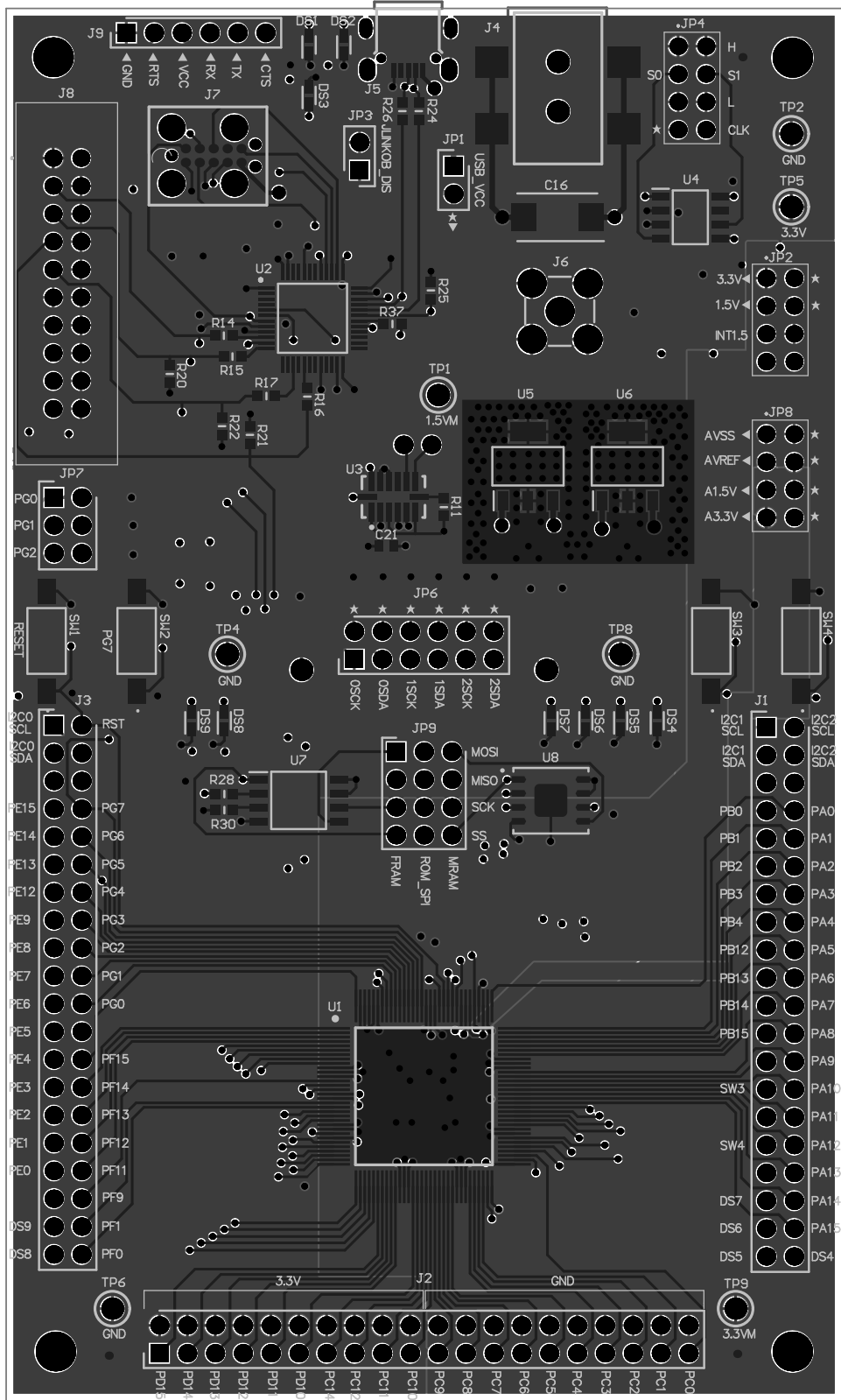
9

10

11

12

Title <b>Polaris Evaluation Board (PEB2)</b>			
Size B	Number <b>VA41628-EVK</b>	Revision <b>C</b>	
Date: 8/16/2024	Sheet of 6 of 6		
File: C:\Users\...\Accel.Pull up&down Res.Sch	Drawn By: <b>JMH</b>		



Line #	Name	Description	Designator	Revision ID	Revision State	Revision Status	Quantity	Manufacturer 1	Manufacturer Part Number 1	Manufacturer Lifecycle 1	Supplier 1	Supplier Part Number 1	Supplier Unit Price 1	Supplier Subtotal 1
	C0603104K8BAC103	Capacitor	C1, C2, C3, C4, C5, C6, C7, C8, C10, C11, C12, C13, C14, C15, C18, C29, C30, C31, C32, C33, C34, C45, C46		Not managed		23	Wurth Electronics	C0603104K8BAC103	Insume Production	Digkey	399-175127-1-ND	0.864	1.47
	87501511Y003	Capacitor Polarized	C16		Not managed		1	Wurth Electronics	87501511Y003		Digkey	732-13327-1-ND	1.72	1.72
	C0603105K8BAC110		C17, C19, C20		Unknown server		14	Wurth Electronics	C0603105K8BAC110	Volume Production	Mouser	86-C0603105K8B	0.23	0.23
	87501511Y003		C21, C24, C26, C33		Not managed		14	Wurth Electronics	C0603104K8BAC103	Volume Production	Mouser	86-C0603104K8BAC103	0.13	0.42
	87501511Y003		C23, C25, C28, C36, C37, C38		Unknown server		14	Wurth Electronics	C0402080R8GAC10	End of life	Mouser	85-C0402080R8GAC10	0.14	0.84
	C0603103K18AC1411	C0603 10,000 pF ±7% 100ppm/°C, 10,000, 50V	C25		Unknown server		1	Wurth Electronics	C0603103K18AC1411	Volume Production	Arrow Electronics	C0603103K18AC1411	0.0076	0.0076
	480pF	CAP-CER 480pF 50V NPO 0603	C38, C39, C42, C43, C44		Unknown server		5	Wurth Electronics	C0402081K5GAC10	Volume Production	Mouser	85-C0402081K5G	0.05	0.5
	C0805106A8PACTU	CAP-CER 100uF 10V X5R 0805	C40, C41		Unknown server		2	Wurth Electronics	C0805106A8PACTU	Volume Production	Mouser	85-C0805106A8P	0.13	0.26
	08TREV0020R-7	TVS Diode (Unidirectional)	D01		Not managed		1	Diodes	08TREV0020R-7	Volume Production	Arrow Electronics	08TREV0020R-7	0.3426	0.3426
	08T5V0017TR	TVS Diode (Unidirectional)	D02		Not managed		1	Diodes	08T5V0017TR	Volume Production	Digkey	08T5V0017C1-ND	0.44	0.44
	AP401608LGGCK	LED	D03, D02, D03, D04, D05, D09		Not managed		4	Everlight	AP401608LGGCK		Digkey	734-2031-1-ND	0.4	2.4
	2420 Header	Header, 20 Pin	D04, D05, D09		Not managed		2	Everlight	AP401608LGGCK		Digkey	734-2031-1-ND	0.4	1.2
		Header, 20 Pin	D1, D2, D3		Not managed		3							
	PJ-002044-SMT-TR	DC Power Jack Right Angle, 25 to 85 deg, 4 Pin 14.8 x 9.4 x 11 mm SMD, RoHS, Tape and Reel			Unknown server		1	CUI	PJ-002044-SMT-TR	Volume Production				
	6291051020S21		D		Unknown server		1	Wurth Electronics	6291051020S21	Volume Production	Farrel	2470822	2.13	2.13
	1053354-1	CONN SMA JACK CTR 50 OHM PCB	A		Unknown server		1	TE Connectivity	1053354-1	Volume Production	Annet	1053354-1	9.39	9.39
	Needle Adaptor	PCB pad for 3.1mm 10 pin needle adaptor	J1		Unknown server		1							
	131-110-01-G-B	Connector	J8		Not managed		1	Semtec	131-110-01-G-B	Volume Production	Newark	01AC1379	3.18	3.18
	104 Header	Header, 4 Pin	J9		Not managed		3							
	131-110-01-G-B	Connector	J10, J11 Header, J12, J13		Unknown server		2							
	131-110-01-G-B	Connector	J12, J13 Header, J14, J15		Not managed		2	Semtec	131-110-01-G-B	Volume Production	Arrow Electronics	131-110-01-G-B	0.33	0.99
	Header 4X2	Header, 4 Pin	J16		Not managed		1							
	131-110-01-G-B	Connector	J17		Not managed		1	Semtec	131-110-01-G-B	Volume Production	Digkey	01AC1379	0.44	0.44
	3rd Header	Header, 3 Pin	J18		Not managed		1							
	Header 2 Pin Right Angle	Header, 2 Pin	J19		Not managed		1							
	705-CRCW06037508XEA	Chip Resistor	K1, K2, K3, K23, K51, K52, K53, K54, K55		Unknown server		9	Whitby	705-CRCW06037508XEA	Volume Production	Annet	52K8713	0.03	0.09
	CRCW06031000XEA, 10K	Chip Resistor 1% 10K Ohm, ±1%, 100 mil, 25 to 135 deg, 0603 (2012 Metric), RoHS, Tape and Reel	R4, R19, R20, R21, R22, R25, R27, R29, R30, R32, R33, R34, R35, R36, R38, R39, R40, R41, R43, R44, R45, R46, R61		Unknown server		23	Whitby	CRCW06031000XEA	Volume Production	Newark	61M5335	0.01	0.23
	CRCW06032020XEA	Chip Resistor 1% 20K Ohm, ±1%, 100 mil, 25 to 135 deg, 0603 (2012 Metric), RoHS, Tape and Reel	R5, R6, R7, R8, R9, R10		Unknown server		6	Whitby	CRCW06032020XEA	Volume Production	Annet	52K9951	0.019	0.09
	0	Chip Resistor 1% 0 Ohm, ±1%, 100 mil, 25 to 135 deg, 0603 (2012 Metric), RoHS, Tape and Reel	R11, R56, R57, R58, R59		Unknown server		5	Whitby	CRCW0603-000020EA	Volume Production				
	10K, CRCW06031000XEA	Chip Resistor 1% 10K Ohm, ±1%, 100 mil, 25 to 135 deg, 0603 (2012 Metric), Thick Film, General Purpose	R12, R13		Unknown server		2	Whitby	CRCW06031000XEA	Volume Production	Newark	61M5335	0.007	0.014
	CRCW06031308XEA, 130	Chip Resistor 1% 130 Ohm, ±1%, 100 mil, 25 to 135 deg, 0603 (2012 Metric), Thick Film, General Purpose	R14, R15, R16, R17, R18, R28, R31, R42, R47, R48, R49, R50		Unknown server		12	Whitby	CRCW06031308XEA	Volume Production	Annet	52K8128	0.01	0.12
	CRCW12102200JNE4HP	Chip Resistor 5% 220 Ohm, ±5%, 100 mil, 25 to 135 deg, 1210 (3225 Metric), Thick Film, General Purpose	R24, R26		Unknown server		2	Whitby	CRCW12102200JNE4HP	Volume Production	Arrow Electronics	CRCW12102200JNE4HP	0.1022	0.2044
	CRCW06031K50XEA	Chip Resistor 1% 1.5K Ohm, ±1%, 100 mil, 25 to 135 deg, 0603 (2012 Metric), Thick Film, General Purpose	R37		Unknown server		1	Whitby	CRCW06031K50XEA	Volume Production	Newark	61M7939	0.005	0.005
	FSM5MTR	FSM5M Push Button Switch 50 mA, 35 to 85 deg, 2 Pin SMD, RoHS, Tape and Reel	S01, S02, S03, S04		Unknown server		4	TE Connectivity	FSM5MTR	Volume Production				
	5003 TEST MODE	Test Point, Orange, Height 4.6 mm, Tail Length 3 mm, 1 Pin 14D, RoHS	TP1, TP2, TP3, TP4, TP5, TP6, TP7, TP8, TP9		Unknown server		4	Keystone Electronics	5003	Volume Production	Future Electronics	14C2640	0.255	2.3
	isa1162n_ports	Plasma Life 120, 1pin	U1		Not managed		1	Wurth Electronics	ISA1162N-C121081PBA					
	STM32F103CBT6	ARM Cortex-M3 32-bit MCU, 128 KB Flash, 20-KB internal RAM, 17 I/Os, 48 pin LQFP, 40 to 85 degC, TQFP	U2		Unknown server		1	STMicroelectronics	STM32F103CBT6	Volume Production	Future Electronics	4825220	4.36	4.36
	ADXL345BCZZ-RL7	3-Axis ±2 g ±1.4 g ±1.6 g Digital MEMS Accelerometer with Digital Output, 1.6 kHz BW, Industrial, 14-pin LGA, Reel	U3		Unknown server		1	Analog Devices	ADXL345BCZZ-RL7	Volume Production	Mouser	584-ADXL345BCZZ-RL7	4.08	4.08
	501MLT	Integrated Circuit	U4		Not managed		1	Burceus	501MLT		Mouser	912-501MLT	1.96	1.96
	MC7103-1502E/DB	250 mA, 14V, Low Quiescent Current LDO Regulator, 3-Pin SOT-223, Extended Temperature	U5		Unknown server		1	Microchip	MC7103-1502E/DB	Volume Production	Arrow Electronics	MC7103-1502E/DB	0.6304	0.6304
	UA78M50ZCY	Integrated Circuit	U6		Not managed		1	Microchip	UA78M50ZCY	Volume Production	Future Electronics	348579	1.36	1.36
	RM25020A-G	Integrated Circuit	U7		Not managed		1	Ogess	RM25020A-G	Volume Production	Resener	RM25020A-G	20.29	20.29
	MR25H256ACDF	Non-Volatile Serial-SPRAM 256Kbit 2.7V to 3.6V 4-Pin QFN, Tray	U8		Unknown server		1	Everspin	MR25H256ACDF		Mouser	936-MR25H256ACDF	5.92	5.92
	EC5-100-8-33-AGM-TR	Crystal or Oscillator	U1		Not managed		1	EC5 International	EC5-100-8-33-AGM-TR		Arrow Electronics	EC5-100-8-33-AGM-TR	0.3429	0.3429
	CX22C5A00000P5W21	Crystal 20MHz ±30ppm (10k) ±100ppm Stability 10ppm RMS 100 Automotive 4-Pin Ultra-Mini-CSSM 176	U2		Unknown server		1	Abracorn	ABRMA0-20.000MAZ-4-T	Volume Production	Newark	84AC2427	0.318	0.318
	EC5-80-8-33D-A05	Crystal or Oscillator	U3		Not managed		1	EC5 International	EC5-80-8-33D-A05	Volume Production	Farrel	409K92	0.83871	0.83871