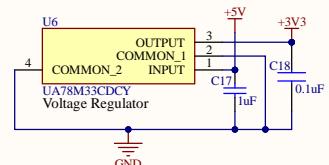
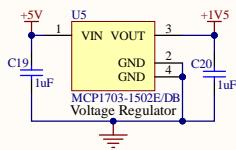


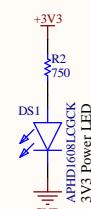
### 3.3 Voltage Regulator



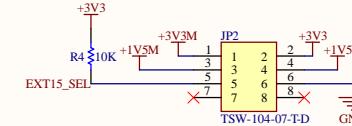
## 1.5 Voltage Regulator



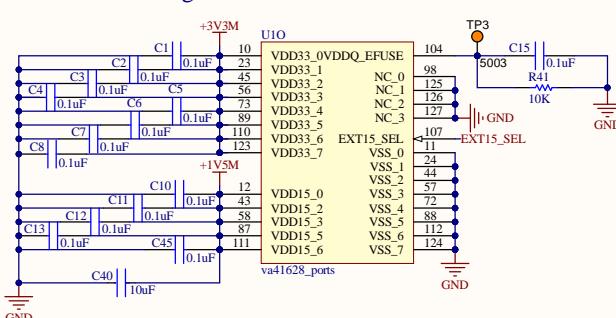
## Power LED



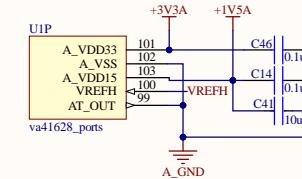
## Power jumpers



Digital Power Pins



## Analaog Power Pins



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

A

A

B

B

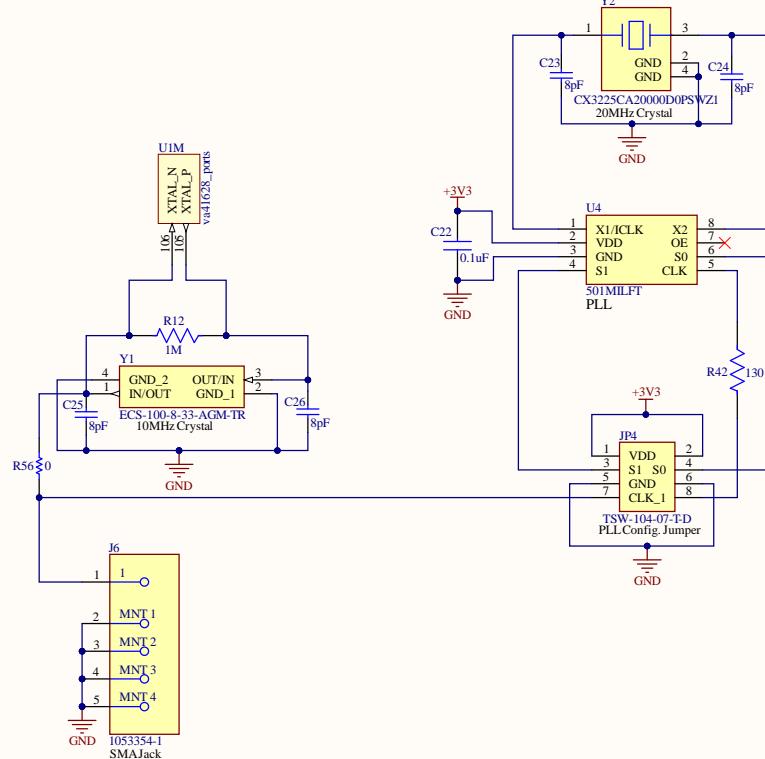
C

C

D

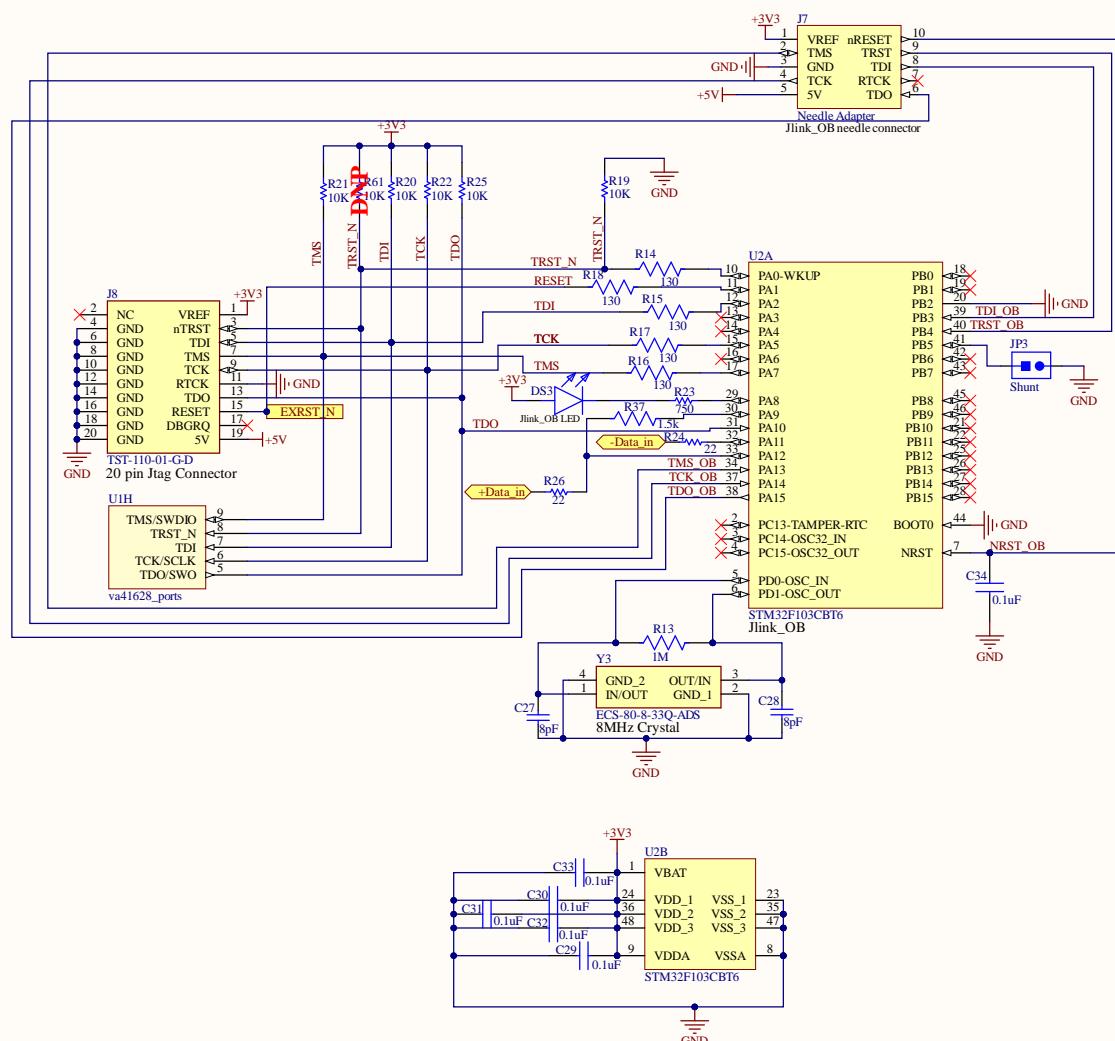
D

### PLL, Crystals, & Clock

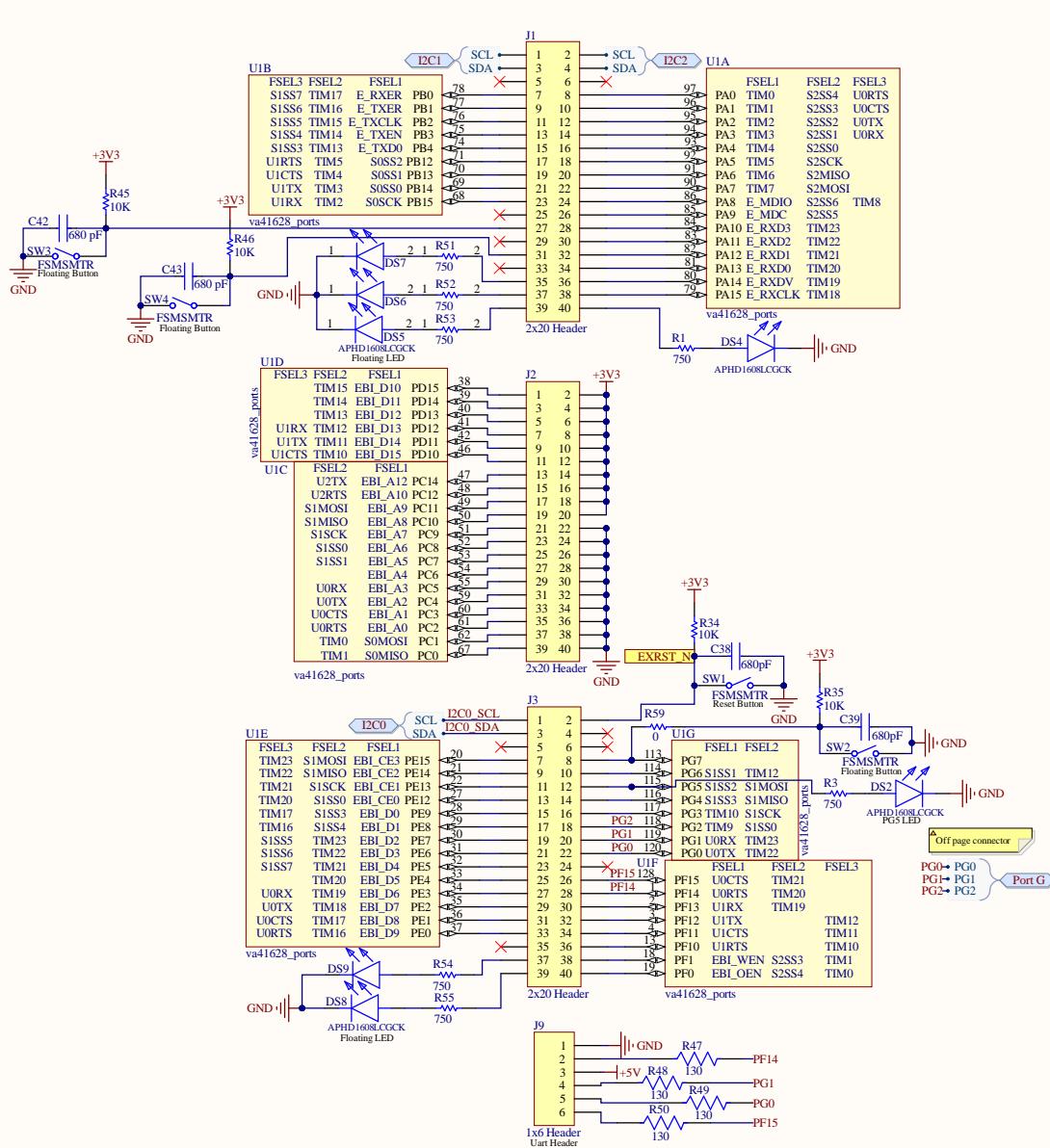


Title Polaris Evaluation Board (PEB2)		
Size B	Number VA41628-EVK	Revision C
Date: 8/16/2024	Sheet of 2 of 6	
File: C:\Users\...\PLL.SchDoc	Drawn By: JMH	

## Jlink\_OB



Title Polaris Evaluation Board (PEB2)		
Size B	Number VA41628-EVK	Revision C
Date: 8/16/2024	Sheet of 3 of 6	Drawn By: JMH
File: C:\Users\...\Jlink_OB.SchDoc		



Title		Polaris Evaluation Board (PEB2)	
Size	Number	Revision	
B	VA41628-EVK	C	
Date:	8/16/2024	Sheet of	4 of 6
File:	C:\Users\...\Connectors\pt1.SchDoc	Drawn By:	JMH

A

A

B

B

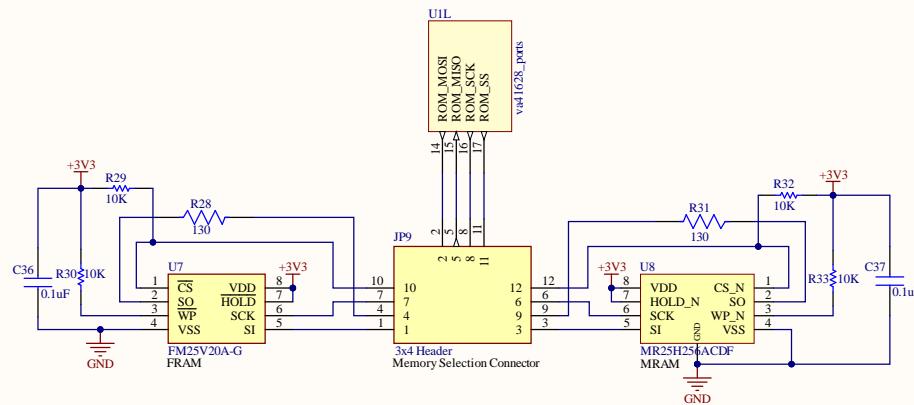
C

C

D

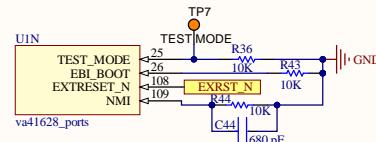
D

### Memory

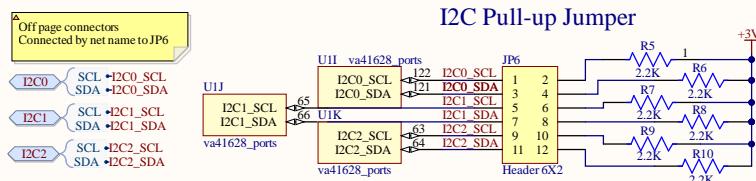
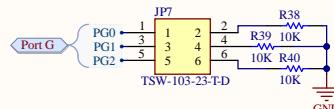


Title Polaris Evaluation Board (PEB2)		
Size B	Number VA41628-EVK	Revision C
Date: 8/16/2024	Sheet of 5 of 6	
File: C:\Users\...\FRAM,MRAM.SchDoc	Drawn By: JMH	

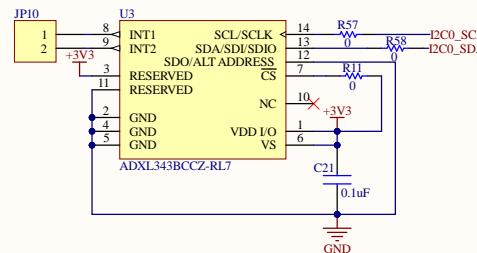
### Test Mode & Critical terminations



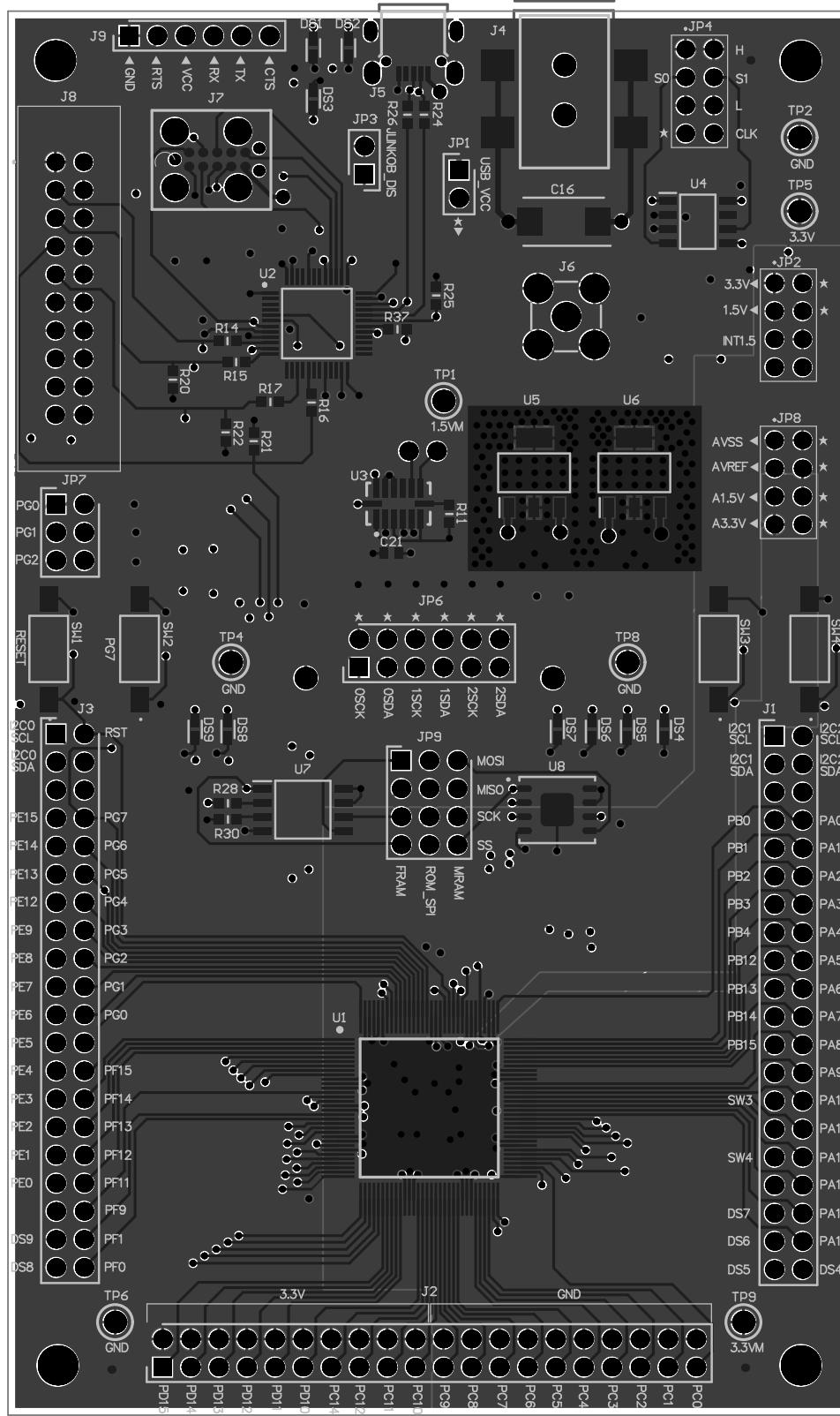
### Pull-down Jumper for test mode operations



### Accelerometer



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



User ID	Name	Description	Designator	Revision ID	Revision State	Revision Status	Quantity	Manufacturer 1	Manufacturer Part Number 1	Manufacturer Lot/Grade 1	Supplier 1	Supplier Part Number 1	Supplier Unit Price 1	Supplier Subtotal 1
C0603C104K38AC7013	Capacitor	C1, C2, C3, C4, C5, C6, C7, C8, C10, C11, C12, C13, C14, C15, C16, C2R, C3R, C31, C12, C31, C14, C45, C46			Not managed		2000M1	C0603C104K38AC7013	Volume Production	Digkey	399.175.72.1-NQD	0.064	1.41	
B75015119003	Resistor	C16			Not managed		1	Wurth Electronics	075015119003	Digkey	732.133.72.1-NQD	1.72	1.72	
Polarized													0.75	
C0603C104K38ACTU	Capacitor	C12, C19, C20			Unknown server		1	KEMET	C0603C104K38ACTU	Volume Production	Mouser	80-C0603C104K38ACTU	0.25	0.25
Capacitor		C12, C19, C20, C21			Unknown server		1	KEMET	C0603C104K38ACTU	End of Life	Mouser	80-C0402CB0905GACTU	0.14	0.08
B49_C0603CB0905GACTU		C23, C24, C25, C26, C27, C28			Unknown server		1	KEMET	C0603CB0905GACTU	End of Life	Mouser	80-C0402CB0905GACTU	0.14	0.08
C0603C103K18AC7411	Capacitor	C0603 10.000µF 10V 1000V 10% 1000V	C35		Unknown server		1	KEMET	C0603C103K18AC7411	Volume Production	Arrow Electronics	C0603C103K18AC7411	0.0076	0.0076
480f6	CAP CER 680PF 10V NPO 0603	C38, C39, C42, C43, C44			Unknown server		1	KEMET	C0603C068K5GACTU	Volume Production	Mouser	80-C0603C068K5G	0.05	0.5
C0805C104K8PACTU	CAP CER 10uF 10V NPO 0603	C40, C41			Unknown server		2	KEMET	C0805C104K8PACTU	Volume Production	Mouser	80-C0805C104K8P	0.13	0.26
08101910286-7	TVS Diode (Unidirectional)	C41			Not managed		1	Diodes	08101910286-7	Volume Production	Arrow Electronics	08101910286-7	0.3426	0.3426
SMF5V01FTIR	Transistor (Unidirectional)	D2			Not managed		1	Siham	SMF5V01FTIR	Volume Production	Digkey	SMF5V01FTIR-ND	0.44	0.46
AP91649BLCGCK	ILED	D51, D52, D53, D54, D55, D58			Not managed		1	Onbright	AP91649BLCGCK	Volume Production	Digkey	754-2031-1-NQD	0.4	2.4
C06A-057_059	Header, 20 pin Dual row	J1, J2, J3			Not managed		1	Onbright	AP91649BLCGCK	Volume Production	Digkey	754-2031-1-NQD	0.4	1.2
2x20 Header					Not managed		1							
PJ-002AH-SMT-TR	DC Power Jack Right Angle, 2.54mm pitch, 4 pins 14.8 x 14.1mm SMD, 100% T/C, and Red				Unknown server		1	TE Connectivity	PJ-002AH-SMT-TR	Volume Production	Farnell	2470822	2.11	2.11
629105150521	CONN SMA JACK 100 50 OHM F/F	J5			Unknown server		1	Wurth Electronics	629105150521	Volume Production				
1053354-1		J6			Unknown server		1	TE Connectivity	1053354-1	Volume Production	Avnet	1053354-1	9.39	9.39
Needle Adapter		J7			Unknown server		1							
ST1-110-01-G-D	Connector	J8			Not managed		1	Santec	ST1-110-01-G-D	Volume Production	Newark	01A2173	3.18	3.18
Shunt		J9			Unknown server		2							
T3W-104-07-T-D	Connector	J12, J14, J18			Not managed		1	Santec	T3W-104-07-T-D	Volume Production	Arrow Electronics	T3W-104-07-T-D	0.33	0.99
Header, 20 pin Dual row	J16				Not managed		1							
T3W-103-23-T-D	Connector	J17			Not managed		1	Santec	T3W-103-23-T-D	Volume Production	Digkey	SAM1074-03-NQD	0.44	0.44
24 Pin Header		J18			Not managed		1							
PZL_CMCW0603170594EA	Header, 20 pin Right Angle	J19, J20, J21, J22, J23, J25, J26, J28, J29, J30, J31, J32, J33, J34, J35, J36, J38, J39, J40, J41, J43, J44, J45, J46, J47			Unknown server		1	Vishay	ZCMCW0603170594EA	Volume Production	Avnet	52K9713	0.01	0.09
CRCW060310K0FKEA, 10K	RES Thick Film, 10Ω, ±1%, 0.125W, 10% TCR, 0.125W, 10ppm/°C, and Red	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		2	Vishay	CRCW060310K0FKEA	Volume Production	Newark	61M5335	0.01	0.23
CRCW08052K0FKEA	RES Thick Film, 8Ω, ±1%, 0.125W, 10% TCR, 0.125W, 10ppm/°C, and Red	R5, R6, R7, R8, R9, R10			Unknown server		6	Vishay	CRCW08052K0FKEA	Volume Production	Avnet	52K9951	0.015	0.09
0	Cap Resistor, 0Ω, 0mΩ, 100 ppm, 10Ω, 10% TCR, 10Ω, 10% TCR, 0.125W, 10ppm/°C, and Red	R11, R56, R57, R58, R59			Unknown server		5	Vishay	CRCW0603-00002DEA	Volume Production				
1M, CRCW08051M00FKEAC	CRCW08051M00FKEAC	R12, R13			Unknown server		2	Vishay	CRCW08051M00FKEAC	Volume Production	Newark	67AK8099	0.007	0.014
CRCW060311308FKEA, 130	RES Thick Film, 130Ω, 1%, 0.125W, 10% TCR, 0.125W, 10ppm/°C, and Red	R14, R15, R16, R17, R18, R28, R21, R42, R47, R48, R49, R50			Unknown server		12	Vishay	CRCW060311308FKEA	Volume Production	Avnet	52K9128	0.01	0.12
CRCW121022R0UNIEAHP		R24, R26			Unknown server		2	Vishay Dale	CRCW121022R0UNIEAHP	Volume Production	Arrow Electronics	CRCW121022R0UNIEAHP	0.1022	0.2044
CRCW060311K50FKEAC	RES 1.5K OHM 1% 170mW 0.050Ω 10% TCR, 0.125W, 10ppm/°C, and Red	R37			Unknown server		1	Vishay	CRCW060311K50FKEAC	Volume Production	Newark	67AK7939	0.005	0.005
FSMSMTR	FSMSMTR Push Button Switch, 4mm, 100mA, 10Ω, 10deg., 2.9g, SMD, RoHS, Tape and Reel	SW1, SW2, SW3, SW4			Unknown server		4	TE Connectivity	FSMSMTR	Volume Production				
5003, TEST MODE	Test Point	T1, T2, T3, T4, T5, T6, T7, T8, T9, T10, T11, T12, T13			Unknown server		1	Keystone Electronics	5003	Volume Production	Future Electronics	1428640	0.255	2.3
v4t1628_ports	Registers 16 bit, 16 pin, 1.4mm height	U1			Not managed		1	VORAGO	V4A1628-C0128FOPBA					
STM32F103CBT6	ARM Cortex-M3 32bit 16MHz 128 KB Flash, 20 KB Internal RAM, 128 KB SRAM, 48 pins, LQFP, -40 to 85 °C, 14 pin LG, Red	U2			Unknown server		1	STMicroelectronics	STM32F103CBT6	Volume Production	Future Electronics	4825220	4.34	4.34
ADXL343BCZ-RL7	ADXL343BCZ-RL7	U3			Unknown server		1	Analog Devices	ADXL343BCZ-RL7	Volume Production	Mouser	584-ADXL343BCZ-RL7	4.08	4.08
501MLFT	Regulated Circuits	U4			Not managed		1	Benesus	501MLFT		Mouser	972-501MLFT	1.94	1.94
MCP1703-150E/DB	250mV, 14V, Low Quiescent Current, LDO Regulator, 3-Pin, SOT-223, Industrial, -40 to 85°C Temperature	U5			Unknown server		1	Microchip	MCP1703-150E/DB	Volume Production	Arrow Electronics	MCP1703-150E/DB	0.6304	0.6304
UA78M33DCY	Integrated Circuit	U6			Not managed		1	Microchip	MC17100-1.5WS	Volume Production	Future Electronics	3689519	1.34	1.34
FM25W20A-G	Integrated Circuit	U7			Not managed		1	Omnis	FM25W20A-G	Volume Production	Future Electronics	FM25W20A-G	20.29	20.29
MR25H256ACDF	MR25H256ACDF Serial SPI 256KB 2.7V to 3.6V 8 Pin QFN-20	U8			Unknown server		1	Evergreen	MR25H256ACDF		Mouser	936-MR25H256ACDF	5.92	5.92
EC5-100-B-33-A04-TR	Crystal or Oscillator	U9			Not managed		1	EC5 International	EC5-100-B-33-A04-TR		Arrow Electronics	EC5-100-B-33-A04-TR	0.3429	0.3429
EC5-100-B-33-A04-TR	Crystal or Oscillator	U10			Not managed		1	EC5 International	EC5-100-B-33-A04-TR		Arrow Electronics	EC5-100-B-33-A04-TR	0.3429	0.3429
CK0225CA20000009PWZ1	CK0225CA20000009PWZ1	U2			Unknown server		1	Abracor	ABMBAIG-20.000MHZ-4-T	Volume Production	Newark	84AC6247	0.318	0.318
EC5-80-B-33Q-A05	Crystal or Oscillator	U3			Not managed		1	EC5 International	EC5-80-B-33Q-A05	Volume Production	Farnell	4059292	0.83871	0.83871