Component list

File: Bill of Materials

Project: On-Board Central Processor.PrjPcb

Variant: Lite

Report Date: 11/01/2023 15:33 Print Date: 11/01/2023 15:35:38 Bill of Materials for Variant [Lite] of Project [On-Board Central Processor.PrjPcb] (No PCB Document Selected)

Contact:

<Parameter ClientCompanyName not found>

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Catalogy Description Catalogy Description Care Page Manufacturer Manufacturer Manufacturer Manufacturer Park Manufacturer Manufacturer Park		FIIII Date.	1 1/0 1/2023	10.00.00										
1 C.14, C15, C16, C16, C12, C24, C25, C27, C26, C27, C26, C27, C26, C27, C27, C27, C27, C27, C27, C27, C27	#	Designator	Category	Description		Manufacturer 1	Manufacturer Part Number 1	Quantity	Supplier 1			Unit Price		
CREATION CAPTION CONTRICT	1	C14, C15, C16, C19, C24, C29, C33, C37, C38, C39,	Ceramic Capacitors	CAP CER 100NF 50V X7R 0603	0603	Samsung	CL10B104KB8NNNC	21	Digi-Key	2100	19618540	0,01	14,11	USD
CTT.CS1	2		Ceramic Capacitors	CAP CER 10UF 25V X5R 0805	0805	Samsung	CL21A106KAYNNNE	8	Digi-Key	800	1513304	0,04	33,84	USD
Color	3	C7, C8, C12, C13	Ceramic Capacitors	CAP CER 22UF 25V X5R 1206	1206	Samsung	CL31A226KAHNNNE	4	Digi-Key	400	2521070	0,15	60,28	USD
Case	4	C17, C31	Tantalum Capacitors	CAP TANT 100UF 6.3V 20% 1206	1206	KEMET	T490A107M006ATE800	2	LCSC	200	50345	0,47	93,66	USD
Case	5	C25, C27	Ceramic Capacitors	CAP CER 100PF 50V NP0 0603	0603	Samsung	CL10C101JB8NNNC	2	Digi-Key	200	963755	0,01	2,44	USD
B	6	C26	Ceramic Capacitors	CAP CER 4.7NF 50V X7R 0603	0603	Samsung	CL10B472KB8NNNC	1	Digi-Key	100	4678655	0,01	1,20	USD
9	7	C30	Ceramic Capacitors	CAP CER 1NF 50V NP0 0603	0603	Samsung	CL10C102JB8NNNC	1	Digi-Key	100	2366213	0,01		
10 D1.DE TVS Divides TVS DIVIDE UNI 15V BIODE SARA I Jurgias SMB J	8	C34	Ceramic Capacitors	CAP CER 10PF 50V NP0 0603	0603	Samsung	CL10C100CB8NNNC	1	Digi-Key	100	240062	0,01	1,32	USD
11 D.2	9	C36	Ceramic Capacitors	CAP CER 1PF 50V NPO 0603	0603	Yageo	CC0603BRNPO9BN1R0	1	Digi-Key	100	31711	0,03	3,42	USD
12 D.5	10	D1, D6	TVS Diodes	TVS DIODE UNI 15V 600W SMB	SMB	Jingdao	SMBJ15A	2	LCSC	200	1520	0,03	5,74	USD
13 05, D7, D8, D9, D10, D11, D12 Schottky Diodes DIODE SCHOTTKY 30V 200MA SOD323 SOD-323-2 ON Semiconductor / Fairchild BAT54HT1G 7 LCSC 700 74580 0.07 48,89 USD 14 J1 USB Connectors CONN RCPT USB2 0 MINI B SMD P/A SMD-9 SHOU HAN MINISPTP 1 LCSC 100 10550 0.04 4.49 USD 15 USB	11	D2	TVS Diodes	TVS DIODE ARRAY 5V SOT23-6	SOT-23-6	Tech Public	USBLC6-2SC6	1	LCSC	100	110830	0,39	39,34	USD
13 D12 Schottly Diodes DIOLE SCHOT INT 307 ZUMAN SUD23 SUD-25 ON Semiconocidor / Fairchild SHOP A SHOP SHOP A	12	D4	Rectifier Diodes	DIODE SCHOTTKY 40V 1A SMA	SMA	Diodes	B140-13-F	1	Digi-Key	100	624124	0,17	17,26	USD
15 J2 Headers and Wire Housings CONN HEADER R/A 16POS 4.2MM PTH-16 Molex 39301160 1 Digi-Key 100 5116 1,99 199.29 USD 16 JP1 Jumper JUMPER 2PIN 1POS 2.5MM PTH-2 XFCN P.2254V-11-02P 1 LCSC 100 87250 0.01 1,33 USD 1,33 USD 1,33 USD 1,34 US	13		Schottky Diodes	DIODE SCHOTTKY 30V 200MA SOD323	SOD-323-2	ON Semiconductor / Fairchild	BAT54HT1G	7	LCSC	700	74580	0,07	48,69	USD
16 JP1 Jumper JUMPER ZPIN 1POS 2-54MM PTH-2 XFCN PZ254V-11-02P 1 LCSC 100 87250 0,01 1,33 USD 17 L.1, L2 Ferrite Beads and Chips FERRITE BEAD 26 OHM 0003 0003 Murata BLM18K260JHID 2 Digi-Key 200 22969 0,05 9,78 USD 18 L3 Fixed Inductors FIXED IND 47-UPL 20% 2A SMD-2 Suniord SWPA403054R7MT 1 LCSC 100 81660 0,28 27,78 USD 19 L4 Fixed Inductors FIXED IND 3.3UH 20% 2A SMD-2 Suniord SWPA403058R3MT 1 LCSC 100 27320 0,28 27,78 USD USD L1,5 L5, L1,1 L12, L13, L15 Ferrite Beads and Chips FERRITE BEAD 220 OHM 0603 0603 Murata BLM18K221BHID 10 Digi-Key 1000 10241 0,03 27,47 USD USD L14 Fixed Inductors FIXED IND 3.3NH 300M 0603 0603 Murata BLM18K221BHID 10 Digi-Key 1000 10241 0,03 27,47 USD	14	J1	USB Connectors	CONN RCPT USB2.0 MINI B SMD R/A	SMD-9	SHOU HAN	MINI5PTP	1	LCSC	100	10650	0,04	4,49	USD
17	15		Headers and Wire Housings	CONN HEADER R/A 16POS 4.2MM	PTH-16	Molex	39301160	1	Digi-Key	100		1,99		
18 L3	16	JP1	Jumper	JUMPER 2PIN 1POS 2.54MM	PTH-2	XFCN	PZ254V-11-02P	1	LCSC	100	87250	0,01	1,33	USD
19	17	L1, L2	Ferrite Beads and Chips	FERRITE BEAD 26 OHM 0603	0603	Murata	BLM18KG260JH1D	2	Digi-Key	200	22969	0,05	9,78	USD
L5, L6, L7, L8, L9, L10, L11, L12, L13, L15 Ferrite Beads and Chips FERRITE BEAD 220 OHM 0603 0603 Murata BLM18KG221BH1D 10 Digi-Key 1000 10241 0,03 27, 47 USD 1001 10241 0,03 27, 47 USD 1001 1	18	L3	Fixed Inductors	FIXED IND 4.7UH 20% 2A	SMD-2	Sunlord	SWPA4030S4R7MT	1	LCSC	100	81660	0,28	27,78	USD
20	19	= '	Fixed Inductors	FIXED IND 3.3UH 20% 2.4A	SMD-2	Sunlord	SWPA4030S3R3MT	1	LCSC	100	27320	0,28	27,78	USD
22 LED1 LEDs LED RED CLEAR 0805 SMD 0805 Vishay Lite-On LTST-C171KRKT 1 Digi-Key 100 306679 0,07 6,99 USD 23 Q1, Q2 MOSFETS MOSFET N-CH 60V 115MA SOT23-3 SOT-23-3 Diodes 2N7002-7-F 2 Digi-Key 200 1705094 0,10 20,28 USD 24 Q4, Q5, Q6 MOSFETS MOSFET P-CH 30V 3A SOT23-3 SOT-23-3 UMW(Youtal Semiconductor) SI2307A 3 LCSC 300 17490 0,04 11,01 USD 25 R1, R4 Chip SMD Resistors RES SMD 100K OHM 1% 1/10W 0603 0603 Yageo RC0603FR-0710KL 2 Digi-Key 200 1291943 0,01 1,5 USD 26 R2 Chip SMD Resistors RES SMD 56.2K OHM 1% 1/10W 0603 0603 Yageo RC0603FR-0756K2L 1 Digi-Key 100 367565 0,01 0,77 USD 27 R26, R27, R30, R31, R35, R36, R37, R41, R43, R50, R36, R37, R41, R43, R50, R53 R53 Chip SMD Resis	20	-1 -1 1 -1 -1 -1	Ferrite Beads and Chips	FERRITE BEAD 220 OHM 0603	0603	Murata	BLM18KG221BH1D	10	Digi-Key	1000	10241	0,03	27,47	USD
23 Q1, Q2 MOSFETS MOSFET N-CH 60V 115MA SOT23-3 SOT-23-3 Diodes 2N7002-7-F 2 Digi-Key 200 1705094 0,10 20,28 USD 24 Q4, Q5, Q6 MOSFETS MOSFET P-CH 30V 3A SOT23-3 SOT-23-3 UMW(Youtal Semiconductor) S12307A 3 LCSC 300 17490 0,04 11,01 USD 25 R1, R4 Chip SMD Resistors RES SMD 100K OHM 1% 1/10W 0603 0603 Yageo RC0603FR-07100KL 2 Digi-Key 200 12919143 0,01 1,54 USD R3, R6, R10, R11, R25, R26, R27, R30, R31, R35, R36, R37, R41, R43, R50, R53 Chip SMD Resistors RES SMD 33.2K OHM 1% 1/10W 0603 0603 Yageo RC0603FR-0710KL 16 Digi-Key 1600 41977694 0,00 5,52 USD RC0603FR-0733K2L 1 Digi-Key 100 2009595 0,01 0,77 USD RC0603FR-0733K2L 2 Digi-Key 200 3767604 0,01 1,46 USD RC0603FR-073BD RC0603FR-073BD RC0603FR-073BD RC0603FR-070RL 2 Digi-Key 200 3767604 0,01 1,46 USD RC0603FR-070RL 2 Digi-K	21	L14	Fixed Inductors	FIXED IND 3.3NH 300MA 0603	0603	Johanson	L-14C3N3SV4T	1	Digi-Key	100	76596	0,04	3,79	USD
24 Q4, Q5, Q6 MOSFETS MOSFET P-CH 30V 3A SOT23-3 SOT-23-3 UMW(Youtal Semiconductor) SI2307A 3 LCSC 300 17490 0,04 11,01 USD 25 R1, R4 Chip SMD Resistors RES SMD 100K OHM 1% 1/10W 0603 0603 Yageo RC0603FR-07100KL 2 Digi-Key 200 12919143 0,01 1,54 USD 26 R2 Chip SMD Resistors RES SMD 56.2K OHM 1% 1/10W 0603 0603 Yageo RC0603FR-0756K2L 1 Digi-Key 100 367565 0,01 0,77 USD 27 R26, R27, R30, R31, R35, R36, R37, R41, R43, R50, R36, R37, R41, R43, R50, R36, R37, R41, R43, R50, R36 Chip SMD Resistors RES SMD 33.2K OHM 1% 1/10W 0603 0603 Yageo RC0603FR-0730K2L 1 Digi-Key 100 2009595 0,01 0,77 USD 29 R7, R8, R12, R34, R40, R44 Chip SMD Resistors RES SMD 30 OHM 1% 1/10W 0603 0603 Yageo RC0603FR-07330KL 6 Digi-Key 100 2536666 0,01 4,62 USD 3	22	LED1	LEDs	LED RED CLEAR 0805 SMD	0805	Vishay Lite-On	LTST-C171KRKT	1	Digi-Key	100	306679			
25 R1, R4 Chip SMD Resistors RES SMD 100K OHM 1% 1/10W 0603 0603 Yageo RC0603FR-0710KL 2 Digi-Key 200 12919143 0,01 1,54 USD 26 R2 Chip SMD Resistors RES SMD 56.2K OHM 1% 1/10W 0603 0603 Yageo RC0603FR-0710KL 1 Digi-Key 100 367565 0,01 0,77 USD RS, R3, R6, R10, R31, R25, R36, R37, R41, R43, R50, R53 Chip SMD Resistors RES SMD 10K OHM 1% 1/10W 0603 0603 Yageo RC0603FR-0710KL 16 Digi-Key 1600 41977694 0,00 5,52 USD RC0603FR-0710KL 1 Digi-Key 100 2009595 0,01 0,77 USD RS, R3, R3, R41, R43, R50, R50 RS MD 33.2K OHM 1% 1/10W 0603 0603 Yageo RC0603FR-0733K2L 1 Digi-Key 100 2009595 0,01 0,77 USD RS, R8, R12, R34, R40, R44 Chip SMD Resistors RES SMD 30 OHM 1% 1/10W 0603 0603 Yageo RC0603FR-0733KL 6 Digi-Key 600 2536666 0,01 4,62 USD R9, R23 Chip SMD Resistors RES SMD 0 OHM JUMPER 1/10W 0603 0603 Yageo RC0603FR-070RL 2 Digi-Key 200 3767604 0,01 1,46 USD	23	Q1, Q2	MOSFETs	MOSFET N-CH 60V 115MA SOT23-3	SOT-23-3	Diodes	2N7002-7-F	2	Digi-Key	200		-		
26 R2 Chip SMD Resistors RES SMD 56.2K OHM 1% 1/10W 0603 0603 Yageo RC0603FR-0756K2L 1 Digi-Key 100 367565 0,01 0,77 USD 27 R3, R6, R10, R11, R25, R26, R27, R30, R31, R35, R36, R37, R41, R43, R50, R53 Chip SMD Resistors RES SMD 10K OHM 1% 1/10W 0603 0603 Yageo RC0603FR-0710KL 16 Digi-Key 1600 41977694 0,00 5,52 USD 28 R5 Chip SMD Resistors RES SMD 33.2K OHM 1% 1/10W 0603 0603 Yageo RC0603FR-0733K2L 1 Digi-Key 100 2009595 0,01 0,77 USD 29 R7, R8, R12, R34, R40, R44 Chip SMD Resistors RES SMD 330 OHM 1% 1/10W 0603 0603 Yageo RC0603FR-07330RL 6 Digi-Key 600 2536666 0,01 4,62 USD 30 R9, R23 Chip SMD Resistors RES SMD 0 OHM JUMPER 1/10W 0603 0603 Yageo RC0603FR-070RL 2 Digi-Key 200 3767604 0,01 1,46 USD	24	Q4, Q5, Q6	MOSFETs	MOSFET P-CH 30V 3A SOT23-3	SOT-23-3	UMW(Youtai Semiconductor)	SI2307A	3	LCSC	300	17490	-	11,01	USD
RS, R6, R10, R11, R25, R26, R27, R30, R31, R35, R36, R37, R41, R43, R50, R53 RES SMD 10K OHM 1% 1/10W 0603 O603 Yageo RC0603FR-0710KL 16 Digi-Key 1600 41977694 0,00 5,52 USD RES SMD 33.2K OHM 1% 1/10W 0603 O603 Yageo RC0603FR-0733K2L 1 Digi-Key 100 2009595 0,01 0,77 USD RES SMD 33.0 OHM 1% 1/10W 0603 O603 Yageo RC0603FR-0733RL Ohip SMD Resistors RES SMD 33.0 OHM 1% 1/10W 0603 O603 Yageo RC0603FR-0733RL Ohip SMD Resistors RES SMD 30 OHM 1% 1/10W 0603 O603 Yageo RC0603FR-0730RL Ohip SMD Resistors RES SMD 30 OHM 1% 1/10W 0603 O603 Yageo RC0603FR-070RL Ohip SMD Resistors RES SMD 0 OHM JUMPER 1/10W 0603 O603 Yageo RC0603FR-070RL Ohip SMD Resistors RES SMD 0 OHM JUMPER 1/10W 0603 O603 O603 O603 O603 O603 O604 Ohip SMD Resistors Ohip SMD Resistors	25	R1, R4	Chip SMD Resistors	RES SMD 100K OHM 1% 1/10W 0603	0603	Yageo	RC0603FR-07100KL	2	Digi-Key		12919143	0,01	1,54	USD
27 R26, R27, R30, R31, R35, R36, R37, R41, R43, R50, R53 Chip SMD Resistors RES SMD 10K OHM 1% 1/10W 0603 0603 Yageo RC0603FR-0710KL 16 Digi-Key 1600 41977694 0,00 5,52 USD 28 R5 Chip SMD Resistors RES SMD 33.2K OHM 1% 1/10W 0603 0603 Yageo RC0603FR-0733K2L 1 Digi-Key 100 2009595 0,01 0,77 USD 29 R7, R8, R12, R34, R40, R44 Chip SMD Resistors RES SMD 330 OHM 1% 1/10W 0603 0603 Yageo RC0603FR-07330RL 6 Digi-Key 600 2536666 0,01 4,62 USD 30 R9, R23 Chip SMD Resistors RES SMD 0 OHM JUMPER 1/10W 0603 0603 Yageo RC0603FR-070RL 2 Digi-Key 200 3767604 0,01 1,46 USD	26	R2	Chip SMD Resistors	RES SMD 56.2K OHM 1% 1/10W 0603	0603	Yageo	RC0603FR-0756K2L	1	Digi-Key	100	367565	0,01	0,77	USD
29 R7, R8, R12, R34, R40, R44 Chip SMD Resistors RES SMD 330 OHM 1% 1/10W 0603 0603 Yageo RC0603FR-07330RL 6 Digi-Key 600 2536666 0,01 4,62 USD 30 R9, R23 Chip SMD Resistors RES SMD 0 OHM JUMPER 1/10W 0603 0603 Yageo RC0603FR-070RL 2 Digi-Key 200 3767604 0,01 1,46 USD	27	R26, R27, R30, R31, R35, R36, R37, R41, R43, R50,	Chip SMD Resistors	RES SMD 10K OHM 1% 1/10W 0603	0603	Yageo	RC0603FR-0710KL	16	Digi-Key	1600	41977694	0,00	5,52	USD
30 R9, R23 Chip SMD Resistors RES SMD 0 OHM JUMPER 1/10W 0603 0603 Yageo RC0603FR-070RL 2 Digi-Key 200 3767604 0,01 1,46 USD	28	R5	Chip SMD Resistors	RES SMD 33.2K OHM 1% 1/10W 0603	0603	Yageo	RC0603FR-0733K2L	1	Digi-Key	100	2009595	0,01	0,77	USD
	29	R7, R8, R12, R34, R40, R44	Chip SMD Resistors	RES SMD 330 OHM 1% 1/10W 0603	0603	Yageo	RC0603FR-07330RL	6	Digi-Key	600	2536666	0,01	4,62	USD
31 R22, R24 Chip SMD Resistors RES SMD 60.4 OHM 1% 1/10W 0603 0603 Yageo RC0603FR-0760R4L 2 Digi-Key 200 475116 0,01 1,54 USD	30	R9, R23	Chip SMD Resistors	RES SMD 0 OHM JUMPER 1/10W 0603	0603	Yageo	RC0603FR-070RL	2	Digi-Key	200	3767604	0,01	1,46	USD
	31	R22, R24	Chip SMD Resistors	RES SMD 60.4 OHM 1% 1/10W 0603	0603	Yageo	RC0603FR-0760R4L	2	Digi-Key	200	475116	0,01	1,54	USD

32	R28, R29, R32, R33, R38, R39, R46, R47, R49, R51, R52, R55, R56	Chip SMD Resistors	RES SMD 1K OHM 1% 1/10W 0603	0603	Yageo	RC0603FR-071KL	13	Digi-Key	1300	30866432	0,00	4,49 USD	
33	R42, R54	Chip SMD Resistors	RES SMD 0.1 OHM 1% 2W 2512	2512	Yageo	PE2512FKE7W0R1L	2	Digi-Key	200	5969	0,22	44,94 USD	
34	R45	Chip SMD Resistors	RES SMD 1M OHM 1% 1/10W 0603	0603	Yageo	RC0603FR-071ML	1	Digi-Key	100	2959239	0,01	0,77 USD	
35	R48	Chip SMD Resistors	RES SMD 270K OHM 1% 1/10W 0603	0603	Yageo	RC0603FR-07270KL	1	Digi-Key	100	272715	0,01	0,77 USD	
36	TP1, TP2	Connectors	TEST POINT LOOP	PTH-1	Keystone Electronics	1041	2	Digi-Key	200	18762	0,21	42,96 USD	
37	U1, U2	Voltage Regulators - Switching	DCDC BUCK 2A TSOT26	TSOT-26-6	Diodes	AP62200TWU-7	2	Digi-Key	200	20589	0,26	52,24 USD	
38	U3	Interface ICs	IC USB-TO-UART BRIDGE 16SOIC	SOIC-16	WCH(Jiangsu Qin Heng)	CH340C	1	LCSC					
39	U4	RF Transceiver Modules	WIFI + BLUETOOTH MCU MODULE	SMD-38	Espressif Systems	ESP32-WROOM-32E-N8	1	LCSC	100	594	3,30	330,00 USD	
40	U6	Interface ICs	IC TRANSCEIVER HALF CANBUS 8SOIC	SOIC-8	NXP Semiconductors	TJA1042T/1J	1	LCSC	100	24244	1,34	134,00 USD	
41	U7	Interface ICs	IC TRANSCEIVER LIN 8SOIC	SOIC-8	NXP Semiconductors	TJA1021T/20/CM,118	1	LCSC	100	5426	0,56	56,48 USD	
42	U8	RF Transceivers	IC RF 2.4GHz TRANSCEIVER 8SOIC	SOIC-8	Nanjing Zhongke Microelectronics	Ci24R1	1	LCSC					
43	U9, U10, U11, U12, U14, U15	Optocouplers	IC OPTOCOUPLER TRANSISTOR 4-SMD	SMD-4	Goodwork	PC817C	6	LCSC	600	111140	0,03	19,26 USD	
44	U13, U17	Sensors	IC CURRENT-SENSING SOT-23-3	SOT-23-3	Tech Public	TP1001S3	2	LCSC	200	8176	0,23	46,14 USD	
45	U16	ICs Drivers	IC DRIVER DC MOTOR 3.6A 8SOIC	SOIC-8	Texas Instruments	DRV8870DDAR	1	Digi-Key	100	31659	1,83	183,33 USD	
46	X1	Headers and Wire Housings	CONN RCPT HSG 16POS 4.20MM	CABLE-16	Molex	39-01-2160	1	Digi-Key	100	27547	0,53	52,62 USD	
47	Y1	Crystal	CRYSTAL 16.0000MHZ 10PPM 9PF SMD	SMD-4	ECS International	ECS-160-9-37-CKM-TR3	1	Digi-Key	100	30907	0,28	28,28 USD	
							143		14100			1675,12	
Approved			Notes			100	pcs:	Total Price for 1pcs		167	75,12 16,75 L		