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## LAUNCHCC3220MODASF

		JNCHCC3220MOD			1			
Designator !PCB1	Quantity 1	Value	Description Printed Circuit Board	PackageReference	PartNumber WCS028	Manufacturer Any	Alternate PartNumber	Alternate Manufacturer
C1, C4, C5, C16, C17, C24, C25, C31, C32, C33, C34, C35, C36, C37		0.1uF	CAP, CERM, 0.1 μF, 10 V, +/- 10%, X5R, 0402	0402	GRM155R61A104KA01 D	MuRata		
C2, C3, C6, C7, C8, C14, C21, C27, C28, C29, C30	11	0.01uF	CAP, CERM, 0.01 μF, 16 V, +/- 10%, X7R, 0402	0402	GRM155R71C103KA01 D	MuRata		
C9, C10, C19	3	0.1uF	CAP, CERM, 0.1 μF, 25 V, +/- 10%, X5R, 0603	0603	06033D104KAT2A	AVX		
C11, C15, C20, C22, C23	5	1uF	CAP, CERM, 1 µF, 16 V, +/- 10%, X5R, 0402	0402	EMK105BJ105KVHF	Taiyo Yuden		
C12, C13	2	12pF	CAP, CERM, 12 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402	CL05C120JB5NNNC	Samsung Electro-Mechanics		
C18		2.2uF 0.01uF	CAP, CERM, 2.2 μF, 16 V, +/- 10%, X5R, 0402 CAP, CERM, 0.01 μF, 10 V, +/- 10%, X5R, 0402	0402	C1005X5R1C225K050B C GRM155R61A103KA01	MuRata		
C38, C40	2	10uF	CAP, CERM, 0.01 µF, 10 V, +/- 10%, X5R, 0402	0805	D GRM21BR61A106KE19			
C39		22uF	CAP, CERM, 10 μP, 10 V, +/- 10 %, X5R, 0805	0805	L C2012X5R1C226K125A			
C41, C42	2	100uF	CAP, CERM, 100 µF, 6.3 V, +/- 20%, X5R, 1206	1206	C GRM31CR60J107ME39			
D1	1		LED, Green, SMD	LED, GREEN, 0603	L SML-LX0603GW-TR			
D2, D6, D8	3	Green Red	LED, Red, SMD	LED, 1.6x.8x.8mm	SML-311UTT86	Rohm		
D3	1	Yellow 45V	LED, Yellow, SMD Diode, Schottky, 45 V, 0.03 A, 0603 Diode	LED_0603	150060YS75000 CD0603-B00340	Wurth Elektronik Bourns		
D4, D5 D7	2 1	Rgb	LED, Rgb, SMD	0603 Diode 1.6x1.6mm	EAST1616RGBA8	Everlight Everlight		
H1	1		Micro USB cable USB-A(M) to Micro USB-B(M) cable,L:80CM ,black		GLJ-C4-1306	英蓓特	-	-
J1	1		Connector, Receptacle, Micro-USB Type B, R/A, Bottom Mount SMT	Micro USB receptacle	105017-0001	Molex		
J3	1		Header, 2.54 mm, 5x2, Gold, TH	Header, 2.54mm, 5x2, TH	61301021121	Wurth Elektronik		
J4, J8	2		Header, 1.27 mm, 5x2, Gold, TH	Header, 1.27 mm, 5x2, TH	FTSH-105-01-F-D-K	Samtec		
J5, J6, J21, J22, J26	5		Header, 2.54 mm, 3x1, Gold, TH	Header, 2.54mm, 3x1, TH	61300311121	Wurth Elektronik		
J7	1		Header, 1.27mm, 7x2, Gold, SMT	Header, 1.27mm, 7x2, SMT	FTSH-107-01-F-DV	Samtec		
J9, J10, J14, J15, J16, J17, J18, J19, J20, J23, J24, J25	12		Header, 2.54 mm, 2x1, Gold, TH	Header, 2.54mm, 2x1, TH	61300211121	Wurth Elektronik		
J12	1		Header, 2.54mm, 3x2, Gold, TH	Header, 2.54mm, 3x2, TH	61300621121	Wurth Elektronik		
L1, L2	2	10 ohm	Ferrite Bead, 10 ohm @ 100 MHz, 1 A, 0402	0402	BLM15AG100SN1D	MuRata Taiyo Yuden		
L3 LBL1	1	2.2uH	Inductor, Wirewound, 2.2 µH, 1 A, 0.143 ohm, SMD Thermal Transfer Printable Labels, 0.650" W x 0.200"	0805 PCB Label 0.650 x	BRC2012T2R2MD THT-14-423-10	Brady		
P1, P2, P3,	4		H - 10,000 per roll  Connector, Receptacle, 100mil, 10x1, Gold plated, TH	0.200 inch 10x1 Receptacle	SSW-110-23-F-S	Samtec		
P4 Q1, Q4, Q6,	4	50V	MOSFET, N-CH, 50 V, 0.22 A, SOT-23	SOT-23	BSS138	Fairchild Semiconductor		None
Q7 Q2	1	-50V	MOSFET, P-CH, -50 V, -0.13 A, AEC-Q101, SOT-363	SOT-363	BSS84DW-7-F	Diodes Inc.		None
Q3, Q5	2	-30V	MOSFET, P-CH, -30 V, -1.5 A, SSOT-3	SSOT-3	FDN358P	Fairchild Semiconductor		None
R1, R2, R3, R4, R5, R6, R8, R28,	9	33.0	RES, 33.0, 1%, 0.1 W, 0402	0402	ERJ-2RKF33R0X	Panasonic		
R32 R7, R9, R10, R11, R26, R30, R31, R33, R135, R136, R137, R142	12	1.0k	RES, 1.0 k, 5%, 0.063 W, 0402	0402	CRCW04021K00JNED	Vishay-Dale		
R12, R42, R44, R46, R49, R50, R52, R53, R54, R56, R67, R58, R60, R62, R63, R64, R65, R66, R67, R68, R69, R70, R71, R72, R73, R74, R104, R105, R114, R115, R119, R124, R124, R124, R128, R130, R131, R131, R131, R131, R131,	41	O	RES, 0, 5%, 0.063 W, 0402	0402	ERJ-2GEOR00X	Panasonic		
R133_R152 R13	1	100	RES, 100, 5%, 0.063 W, 0402	0402	CRCW0402100RJNED	Vishay-Dale		

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Designator R14	Quantity	Value 100k	Description RES, 100 k, 5%, 0.1 W, 0603	PackageReference 0603	PartNumber CRCW0603100KJNEA	Manufacturer Vishay-Dale	Alternate PartNumber	Alternate Manufacturer
R15	1	330k	RES, 330 k, 5%, 0.063 W, 0402	0402	CRCW0003100KJNED	Vishay-Dale Vishay-Dale		
R16	1	220k	RES, 220 k, 5%, 0.063 W, 0402	0402	CRCW0402230KJNED	Vishay-Dale Vishay-Dale		
R17, R27,	7	100k	RES, 100 k, 5%, 0.063 W, 0402	0402	CRCW0402100KJNED	Vishay-Dale		
R134,						1		
R144,								
R149,								
R150, R151								
R18, R19	2	220	RES, 220, 5%, 0.1 W, 0603	0603	CRCW0603220RJNEA	Vishay-Dale		
R20, R21,	5	10k	RES, 10 k, 5%, 0.063 W, 0402	0402	CRCW040210K0JNED	Vishay-Dale		
R113, R139, R140								
R22	1	100	RES, 100, 1%, 0.063 W, 0402	0402	CRCW0402100RFKED	Vishay-Dale		
R23	1	100	RES, 100, 1%, 0.1 W, 0402	0402	ERJ-2RKF1000X	Panasonic		
R24	1	4.87k	RES, 4.87 k, 1%, 0.1 W, 0603	0603	CRCW06034K87FKEA	Vishay-Dale		
R25, R141,	6	750	RES, 750, 5%, 0.1 W, 0603	0603	RC0603JR-07750RL	Yageo America		
R143,								
R145,								
R146, R147								
R29	1	51	RES, 51, 5%, 0.063 W, 0402	0402	CRCW040251R0JNED	Vishay-Dale		
R34, R35	2	33	RES, 33, 5%, 0.1 W, 0603	0603 0603	CRCW060333R0JNEA	Vishay-Dale Panasonic		
R38 R84, R87,	4	470	RES, 0, 5%, 0.1 W, 0603 RES, 470, 1%, 0.1 W, AEC-Q200 Grade 0, 0402	0402	ERJ-3GEY0R00V ERJ-2RKF4700X	Panasonic		
R92, R93	7	470	RES, 470, 176, 0.1 W, AEC-Q200 Glade 0, 0402	0402	ENJ-ZNNF4700X	i anasonic		
R85, R86,	4	576k	RES, 576 k, 1%, 0.063 W, 0402	0402	CRCW0402576KFKED	Vishay-Dale		
R94, R95								
R88, R89,	4	422k	RES, 422 k, 1%, 0.063 W, 0402	0402	CRCW0402422KFKED	Vishay-Dale		
R96, R97								
R107	1	270	RES, 270, 5%, 0.063 W, 0402	0402	CRCW0402270RJNED	Vishay-Dale		
R108	1	100k	RES, 100 k, 0.5%, 0.063 W, 0402	0402	CRCW0402100KDHED	Vishay-Dale	]	
D400	4	2.21	DEC 224 50/ 0.000 W 0400	0403	CDCW04000KC0 INFE	Vichov Dolo		
R109 R116, R117	2	2.2k 3.3k	RES, 2.2 k, 5%, 0.063 W, 0402 RES, 3.3 k, 5%, 0.063 W, 0402	0402 0402	CRCW04022K20JNED CRCW04023K30JNED	Vishay-Dale Vishay-Dale		
R116, R117	1	3.3k 100k	RES, 100 k, 1%, 0.1 W, 0402	0402	ERJ-2RKF1003X	Panasonic		
SW1, SW2,	3		Switch, SPST, 0.05 A, 12 VDC, SMD	7.8x3.5mm	1188E-1K2-V-TR	Diptronics		
SW3			, or or, oldor, 12 100, oldo					
SW4	1		Switch, Tactile, SPST-NO, SMT	Switch, 6.1x1.8x4.6	EVQ-PSD02K	Panasonic		
				mm				
TP2	1	SMT	Test Point, Miniature, SMT	Testpoint_Keystone_	5015	Keystone		
				Miniature				
U1	1		Tiva C Series Microcontroller, PDT0128A	PDT0128A	TM4C1294NCPDTI3R TPD4S010DQAR	Texas Instruments	TM4C1294NCPDTI3	Texas Instruments
U2	1		ESD Solution for High-Speed Differential Interface, 4 Channels, -40 to +85 degC,10-pin SON (DQA), Green	DQA0010A	IPD45010DQAR	Texas Instruments	Equivalent	Texas Instruments
			(RoHS & no Sb/Br)					
U3, U4, U6	3		Single-Bit Dual-Supply Bus Transceiver With	DCK0006A	SN74LVC1T45DCKR	Texas Instruments	SN74LVC1T45DCKT	Texas Instruments
,,	_		Configurable Voltage Translation and 3-State Outputs,					
			DCK0006A					
U5	1		Precision Micropower Shunt Voltage Reference, 0.2%	DBZ0003A	LM4040B25IDBZR	Texas Instruments	Equivalent	Texas Instruments
			accuracy, 2.5 V, 15 ppm / degC, 15 mA, -40 to 85					
			degC, 3-pin SOT-23 (DBZ), Green (RoHS & no Sb/Br)					
U7	1		Low Cost, Low Power, Rail-to-Rail Operational	PW0014A	OPA4342EA/250	Texas Instruments	Equivalent	Texas Instruments
			Amplifier MicroAmplifier(TM) Series, 2.7 to 5.5 V, -55 to 125 degC, 14-pin SOP (PW0014A), Green (RoHS & no					
			Sb/Br)					
U9	1		SimpleLink Wi-Fi and Internet-of-Things Module	MON0063A	CC3220MODASF12MO	Texas Instruments	XCC3220MODASF12MO	Texas Instruments
00			Solution, a Single-Chip Wireless MCU, MON0063A		NR	T CAGO III CITICITIC	ACCULLUMO BAICH TEMPO	r sado monarronto
			(QFM-63)					
U10	1		Infrared Thermopile Sensor in Chip-Scale Package,	YZF0008AEAE	TMP006AIYZF	Texas Instruments		Texas Instruments
			YZF0008AEAE					
U11	1		Digital, triaxial acceleration sensor, 12LGA	LGA, 12-Leads, Body	BMA222E	Bosch Solar Energy		
				2x2mm, Pitch 0.5mm				
U12	1		Buck Step Down Regulator with 3 to 17 V Input and 3.3	Decounsy	TPS62162DSGR	Texas Instruments	Equivalent	Texas Instruments
012	'		V Output, -40 to 85 degC, 8-Pin WSON (DSG), Green	DOGUUUA	11 302 102D3GK	reads instruments	Lquivalent	I GAGO IIIOLIUIIICIIIS
			(RoHS & no Sb/Br)					
Y1	1		Crystal, 16MHz, 8pF, SMD	3.2x0.75x2.5mm	NX3225GA-16.000M-	NDK		
	<u></u>				STD-CRG-1		<u> </u>	
FID1, FID2,	0		Fiducial mark. There is nothing to buy or mount.	N/A	N/A	N/A		
FID3, FID4,								
FID5, FID6	0		Header 2.54 mm 2:4 O-14 TH	Header 0.54:	64200244424	Murth Elektronik		
J11	0		Header, 2.54 mm, 2x1, Gold, TH	Header, 2.54mm, 2x1, TH	61300211121	Wurth Elektronik		
R36, R37,	0	0	RES, 0, 5%, 0.063 W, 0402	0402	ERJ-2GE0R00X	Panasonic		
R40, R41,	Ü							
R43, R45,								
R47, R48,								
R51, R55,								
R59, R61,								
R75, R76,								
R77, R78,								
R79, R80,								
R81, R82,								
R83, R90,								
R91, R98, R99, R100,								
R101,								
R101, R102,								
R102,								
R118,								
R120,								
R122,								
R123,								
R125. R129	^	0	DEC 0.5% 0.4.W 0000	0603	ED LOCEVODOS (	Danasania		
R39, R148 R106,	0	0 100k	RES, 0, 5%, 0.1 W, 0603 RES, 100 k, 5%, 0.063 W, 0402	0603 0402	ERJ-3GEY0R00V CRCW0402100KJNED	Panasonic Vishay-Dale		
R106, R110,	U	TOOK	11CO, 100 K, 070, 0.003 W, 0402	0-102	ONOWO-UZ TOUNJINED	violiay-Dale		
R111, R112								
U8	0		ULTRA LOW POWER, 64M-BIT [x 1/x 2/x 4] CMOS	SOP-8	MX25R6435FM2IL0	Macronix International Co., LT		
			MXSMIO (SERIAL MULTI I/O) FLASH MEMORY, SOP-		1			
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