

## CCPF Starter Kit Board (Ver.2) BOM List

Item	Quantity	Reference	Part	Material	Maker	Comments
1	25	CB1,CA1,CB3,C3,C4,CB5, CB6,C6,CB7,C7,CB8,C8,CA9, C9,CB10,CB11,CB13,CA17, CB19,CA19,CB20,CA20,CB22, CB23,CB24	0.1uF/16V	C1005X7R1C104K(1005,16V,10%, X7R)	TDK	X5R
2	8	CA2,CA3,CA10,CA11,CB14, CB15,CB16,CB17	100uF/16V	EMK325ABJ107MM(3225,16V,20%, X5R)	TAIYO YUDEN	X5R
3	4	CA4,CA6,CA8,CA12	1uF/16V	GRM188R71C105K(1608,16V,10%)	Murata Manufacturing	
4	8	CB2,CB4,CA5,CA7,CB9,CB12, CB18,CB21	10uF/16V	GRM188R61C106KAALD(1608,16V,10%)	Murata Manufacturing	
5	4	CA13,CA14,CA15,CA16	47uF/10V	C2012X5R1A476M125AC(2125,10V,20%, X5R)	TDK	X5R
6	1	CA18	1uF.	chip ceramic(1608),NFM18PS105R0J3#	Murata Manufacturing	lead-through capacitor
7	1	CN1	3-1827231-6	COM Express PCB Mount Receptacle 440pin	TycoElectronics	
8	2	CN3,CN2	SM3ZS067U410AMR1000	M.2 PCIe Card edge connector 75pin M Key	JAE	67pin
9	1	CN4	46765-1301	microHDMI Receptacle SMT19pin, with Through	Molex	
10	1	CN5	48404-0003	USB3.0 type-A, vertical	Molex	
11	1	CN6	48204-0001	USB2.0 type-A, vertical	Molex	
12	1	CN7	39291088	Header, 4x2pin	Molex	old No.5569-08A1
13	0	CN8	XG8V-0831	Header, 8x1pin	OMRON	not implemented
14	1	CN9	39291028	Header, 1x2pin	Molex	old No.5569-02A1
15	1	CN10	ZX62D-AB-5P8(30)	microUSB Type-AB	HRS	
16	1	CN11	1051330011	MicroUSB type-B, vertical	Molex	
17	1	CN12	54548-2271	FPC connector, 0.5mm pitch, 22pin	Molex	
18	1	CN13	SFW15R-1STE1LF	FPC connector, 1mm pitch, 15pin, grounded	FCI	MISUMI
19	1	CN14	XG8V-0431	Header, 4x1pin	OMRON	
20	1	CN15	22-04-1031	Header, 3x1pin	Molex	
21	1	CN16	S6B-XH-A	Header, 6x1pin,BOX, Light angle	JST	
22	3	CSP1,CSP3,CSP9	100uF/50V(al)	EMVA500ADA101MHA0G Chip(φ8x10)50V	IPPON CHEMI-CO	Bulk
23	2	CSP2,CSP10	4.7uF/50V	C2012X5R1H475K125AB	TDK Corporation	X5R
24	5	CSP4,CSP5,CSP6,CSP7,CSP8	10uF/50V	C3216X5R1H106K160AB(3215,50V,10%)	TDK Corporation	X5R
25	2	C2,C1	0.0047uF/50V	C1608X7R1H472K(1608,50V10%)	TDK Corporation	
26	1	C5	22pF	C1608C0G1H220J080AA(1608,50V, 5%)	TDK Corporation	
27	2	D3,D1	TPD2E001DRLR	USB protection diode	TI	
28	1	D2	TPD4E05U06DQAR	USB protection diode	TI	
29	2	D5,D4	ESDONCAN1	CAN protection diode	ON semi	
30	6	GND1,GND2,GND3,GND4,GND5, GND6	HK-2-G	Check terminal	MAC8	
31	7	LED1,LED2,LED3,LED4,LED5, LED6,LED7	SML-P11MT	1.0x0.6mm Yellow-green	ROHM	
32	2	L1,L5	DLM11SN900HZ2#	Choke coil(100MHz90Ω) 2 line 1 pair	Murata Manufacturing	
33	1	L2	DLP1NDN900HL4#	Choke coil(100MHz90Ω) 4line 2 pair	Murata Manufacturing	
34	6	L3,L4,L6,L7,L10,L11	BLM18KG260TN1	Ferrite bead, size1608, 26Ω @100MHz	Murata Manufacturing	
35	2	L8,L9	ACT1210-510-2P-TL00	Choke coil, size3225	TDK	
36	2	Q7,Q1	RE1C001UNTCL	Nch MOS-FET, SC-89 3pin	Rohm	
37	2	Q3,Q2	TPC8133.LQ(S)	PMOS-FET SOP8pin	TOSHIBA	
38	2	Q5,Q4	SSM3K72CFS	Nch MOS-FET, SC-75 3pin	TOSHIBA	
39	1	Q6	RQ5C030TP	Pch MOS-FET, SC-96 3pin	ROHM	
40	1	Q8	TLP291-4	Photocoupler, SO 16pin	TOSHIBA	

## CCPF Starter Kit Board (Ver.2) BOM List

Item	Quantity	Reference	Part	Material	Maker	Comments
41	11	R1,R10,R11,R16,R17,R24, R30,R34,R35,R86,R87	0	RK73Z1ETTP(1005)	KOA	
42	2	R3,R2	22	RK73H1ETTP-22Ω F(1005)	KOA	
43	12	R4,R5,R6,R7,R8,R9,R12, R13,R21,R29,R68,R88	2k	RK73H1ETTP-2kΩ F(1005)	KOA	
44	9	R14,R15,R28,R69,R92,R98, R101,R107,R109	1k	RK73H1ETTP-1kΩ F(1005)	KOA	
45	21	R18,R22,R23,R25,R26,R31, R33,R60,R61,R62,R70,R71, R72,R73,R74,R75,R85,R91, R97,R114,R115	10k	RK73H1ETTP-10kΩ F(1005)	KOA	
46	12	R19,R20,R93,R94,R95,R96, R99,R100,R102,R104,R105, R106	4.7k	RK73H1ETTP-4.7kΩ F(1005)	KOA	
47	1	R27	23.7k	RK73H1ETTP-23.7kΩ F(1005)	KOA	
48	1	R32	44.2k	RK73H1ETTP-44.2kΩ F(1005)	KOA	
49	4	R36,R37,R56,R57	62(1/2W)	RK73B2ETTD620J	KOA	
50	6	R38,R39,R40,R41,R42,R43	100(1608)	RK73H1JTTP-100Ω F(1608)	KOA	
51	2	R59,R58	20k	RK73H1ETTP-20kΩ F(1005)	KOA	
52	1	R63	39.2k(1%)	RK73H1ETTP-39.2kΩ F(1005)	KOA	
53	1	R64	51k	RK73H1ETTP-51kΩ F(1005)	KOA	
54	1	R65	41.2k(1%)	RK73H1ETTP-41.2kΩ F(1005)	KOA	
55	1	R66	392k	RK73H1ETTP-392kΩ F(1005)	KOA	
56	1	R67	13.7k(1%)	RK73H1ETTP-13.7kΩ F(1005)	KOA	
57	0	R89,R90	XXX(1608)	RK73H1JTTP-XXXΩ F(1608)	KOA	not implemented
58	3	R103,R108,R110	47k	RK73H1ETTP-47kΩ F(1005)	KOA	
59	3	R111,R112,R113	390	RK73H1ETTP-390Ω F(1005)	KOA	
60	3	SW2,SW1,SW7	CHS-02TA1	SMT 2-pole DIPSW	COPAL	
61	1	SW3	M-2012L-V	Single-Pole/Double-Throw Toggle Switch	NKK SWITCHES	
62	3	SW4,SW5,SW6	SKHHLPA010	Tact switch, vertical	ALPS	AKIZUKI
63						
64	6	TPSCLK1,TPSCLK2,TP3V3, TP5V0,TPVIN,TPPON-	Thru	φ 1mm, Through hole		
65	6	U1,U2,U4,U15,U18,U22	M74VHC1GT08DTT1G	TSOP-5	ON semi	
66	1	U3	NB3N2304NZDTG	1:4 Clock buffer, TSSOP-8pin	ON semi	
67	1	U5	TCA9539QPWRQ1	I2C to I/O Expander, TSSOP-24pin	TI	
68	1	U6	TPD12S016PWR	HDMI Companion chip, TSSOP-24pin	TI	
69	2	U7,U8	NCP380HSNAJAAT1G	USB Power switch, TSOP-6pin	ON semi	
70	2	U9,U10	TCAN332GDCNT	CAN driver, SOT23-8pin	TI	
71	1	U11	LTM4613EV#PBF	DC/DC μ Module regulator, LGA133pin	analog devices	Old Linear, LTM4613IV#PBF acceptable
72	1	U12	LTM8024EY#PBF	Silent Switcher μ Module regulator,	analog devices	Old Linear, LTM8024IY#PBF acceptable
73	1	U14	TPS3808G15DBV	RESET IC , SOT23 6pin	TI	
74	1	U16	R5F10Y47ASP		Renesas Electronics	
75	2	U17,U19	TCA9517ADGKR	I2C transceiver, VSSOP 8pin	TI	
76	3	U21,U20,U23	SN74LVC2G14DBV	Shumit inverter, SOT23 6pin	TI	
77	1		PCB	T0A1BA02	layart	

CCPF Starter Kit Board (Ver.2) BOM List

Item	Quantity	Reference	Part	Material	Maker	Comments
		<Attachment>				
78	1	CN7	39012080	Housing, 4x2pin	Molex	old No.5557-08R
79	1	CN9	39012020	Housing, 1x2pin	Molex	old No.5557-02R
80	11	CN7,CN9	39000039	Crimp Terminal	Molex	old No.5556-TL
81	1	CN16	XHP-6	Housing, 6x1pin	JST	
82	7	CN16	SXH-001T-P0.6	Crimp Terminal	JST	AWG28-22 Compatible
83	1	R116	10k	Resistor	ANY	
		Change history				
		<2021.3.1>				
		Item98 Resistor10kΩ added				