



AU Group Electronics BOM for CB0703 Rev. A

Qty	Reference	Part Name	Value	Description
10	C1,4,6,8-11,13,16-17	CAP_00.1UF_0805_HH	0.1uF	CAP .10UF 50V CERAMIC X7R0805
1	C15	CAP_47UF35V_ELECT_AL_MVY_SMD_HH	47uF	CAP 47UF 35V ±20% 1000 hr;6.6mm x 6.6mm x 6.3mm;105°C;ELECT MVY SMD;
1	C18	CAP_0001UF_0805_HH	1uF	CAP 1 uF 50V CERAMIC +80%-20% Y5V 0805
2	C2-3	CAP_0027PF_0805_HH	27pF	CAP 27PF 50V CERM CHIP 0805 SMD
3	C5,12-14	CAP_10UF16V_TAN_ELECTROLY_3216-18_SMD_HH	10 uF	CAP TANTALUM 10UF 16V 10%SMD;- 55 °C to + 85°;Vishay/Sprague293D106X9016A2TE3, package3216-18 (EIA)
1	C7	CAP_0.47UF_0805_HH	0.47uF	CAP CERM .47UF 16V X7R ±10%0805, EPCOS Inc, B37941K9474K60; General Purpose MLCC
1	D1 *see note 1	DIO_MMBD4148_SILICONEPITAXIAL_SOT23_HH	MMBD4148	DIODE SWITCH 100V 150MASOT23; MMBD4148-TP
1	D100 *see note 1	DIO_1N4148W_SOD123_HH	1N4148W	Diode Switch 1N4148W 100V150MA SOD123
2	D2-3	DIO_BAT54_SCHOTTKY_SOT23_HH	BAT54	DIODE SCHTKY SGL 30V 200MASOT23;BAT 54 E6327;
1	D4	DIO_ZHCS1000_SCHOTTKY_SOT23_HH	ZHCS1000	DIODE SCHOTTKY 40V 1.0ASOT-23;ZHCS1000TA;ZetexInc;Fast Recovery =< 500 ns,> 200mA;trr 12ns
1	D5	DIO_000S1G_SMA_HH	S1G	Diode S1G GPP 1A 400V SMA
1	DS1	LED_RED_DIFFUSED_3MM_THR_HH	Red	LED 3MM HI-EFF RED DIFFUSED,LTL-1CHE;Round, T-1; 12.6 Millicandela;2.1 V
1	DS2	LED_GREEN_DIFFUSED_3MM_THR_HH	Green	LED 3MM GREEN DIFFUSEDthrough hole, LTL-1CHG;Round,T-1; 12.6 Millicandela;2.1 V
1	DS3	LED_YELLOW_CLEAR_3MM_THR_HH	Yellow	LED 3MM YELLOW TRANSPARENT,LTL-1CHYE;Round, T-1; 40 Millicandela;2.1 V
1	J1	CON_POWER_JACKET_2.1MM_16V_2.5A_HH	Power Jacket	CONN POWER JACK2.1MM;PJ-002A;16v2.5A;Male;Jack;2.1mm ID,5.5mm OD;2 Conductors, 3Contacts;Through Hole, RightAngle;5000 cycles min
1	J2 *see note 0	CONNECTOR_5PIN_USB_HH	USBminiB	CONN Receptacle MINI USB2.05POS Board Guide UX60-MB-5S8
1	J3	CONNECTOR_6PIN_RJ11_6P6C_HH	RJ11 6P6C	CONN MOD JACK 6-6 R/APCB;88400-066LF; black

Qty	Reference	Part Name	Value	Description
1	J4 *see note 0	CONNECTOR_4PIN_USB_TYPE_B_HH	USB typeB	CONN RCPT USB TYPE B R/APCB;61729-0010BLF;ThroughHole, Right Angle,Horizontal;
1	L1	IND_00680UH_50MA_1812_HH	680uH	Inductor CM453232-681KL;680uH, +/- 10 %, 50mA,1812, Ferrite core
1	Q1	P_MOSFET_IRLML6402_SOT23_HH	IRLML6402	IRLML6402TRPBF, P Channel,Vds:-20V , Id:-3.7A,65mohm,Vgs:-4.5V ,
4	Q2-3,5-6	TRANSISTOR_PNP_PART_CC	MMBT3906	Transistor PNP MMBT3906 40V300MW SOT23 200mA
3	Q4,7,8	TRANSISTOR_NPN_PART_CC	MMBT2222	Transistor NPN MMBT2222AK GP40V SOT23 600mA MARK 1PK
3	R10,14,19	RES_000010_0805_HH	10	Res 10 Ohm 0.1W 1% 0805 SMD150V
4	R11,15,20,33	RES_000047_0805_HH	47	Res 47 Ohm $\pm 1\%$ 0.1W 150V ± 100 ppm 0805
4	R1-3,18	RES_000300_0805_HH	300	Res 300 Ohm 0.1W 0805 SMD $\pm 1\%$
3	R13,21,37	RES_00001K_0805_HH	1K	Res 1k Ohm $\pm 1\%$ 0.1W 150V ± 100 ppm 0805
1	R17	RES_000820_0805_HH	820	Res 820 Ohm $\pm 1\%$ 0.1W150V ± 100 ppm 0805
5	R22,26, 35-36,301	RES_004.7K_0805_HH	4.7K	Res 4.7k Ohm $\pm 1\%$ 0.1W150V ± 100 ppm 0805
1	R23	RES_00100K_0805_HH	100K	Res 100k Ohm 0.125W 1% 0805SMD 100V
2	R28,31	RES_000121_0805_HH	121	Res 121 Ohm $\pm 1\%$ 0.125W150V ± 100 ppm 0805
10	R4-7,12,16,25,27,29,32	RES_00010K_0805_HH	10K	Res 10K Ohm $\pm 1\%$ 0.1W150V ± 100 ppm 0805
5	R8-9,24,30,34	RES_002.7K_0805_HH	2.7K	Res 2.7K Ohm $\pm 1\%$ 0.1W150V ± 100 ppm 0805
1	SW1	SWI_TACT_SPST_SMT_HH	TACT SWITCH	Push button
1	U1	PIC18F2550/SO_HH	PIC18F2550-I/SO	uc, PIC18F2550/SO with USBmoduleI
1	U2	OPAMP_MCP6001U_5PIN_HH	MCP6001U	IC OPAMP 1.8V 1MHZ SNGLSOT23-5 MCP6001UT-I/OT
2	U3-4	24LC512_SOIC8_208MIL_HH	24LC512	IC SRL EE 512K 64KX8 2.5V8SOIC;24LC512-I/SM;400kHz
1	U5	LM317_SOIC8_PART_CC	LM317L	IC 3-TERM ADJ REG8-SOIC
1	U6	DUAL_MOSFET_FDC6420C_SSOT-6_HH	FDC6420C	Dual N/P Channel; Vds:20V,Id:3A, Rds(on):70mohm,Vgs:4.5V,SuperSOT-6
1	Y1	CRY_00020M_SMD_70C_HH	20M	Crystal 20.000 MHZ SMT 18PFHCM49 AT Cut SMD metal-cantype

86

Note 0: J2 and J4 are exclusive to each other, only one component need to be installed

Note 1: D1 and D100 are exclusive to each other, only one component need to be installed