C3Jr_v2: PARTS LIST (BoM)

BT1	ref	value	Vendor	Vendor P/N	NOTE1	NOTE 2
C1, C2, C8 100u Digikey P833-ND 100uFriety. C1, C2 only required if cascading C3Jr. C3, C4, C5, C6, C7, C9, C10 100n Digikey 399-5863-ND Optional if using crystal instead of resonator C11, C12 22p Digikey BE1034CT-ND Optional if using crystal instead of resonator C11, C12 C2p Digikey S99-5863-ND Optional if using crystal instead of resonator C11, C12 C2p Digikey C535A-WUN-CU0V0231-ND Optional if using crystal instead of resonator C11, C12 C2p Digikey C535A-WUN-CU0V0231-ND CFEE LED SIMP CONTROL OPTION CONTROL O	BT1	BATT_RTC	DigiKey	3003K-ND		
C3, C4, C5, C6, C7, C9, C10	*	3V CR2032 Battery	DigiKey	P189-ND		2032 Coin Battery for BT1 socket
C11, C12 22p Digikey BC1034CT-ND Optional if using crystal instead of resonator Optional Optional if using crystal instead of resonator Optional Optional CRE LLED Some Cool White Clear 110deg	C1, C2, C8	100u	DigiKey	P833-ND		100uF/16V. C1, C2 only required if cascading C3Jr.
CD1, CD2, CD3	C3, C4, C5, C6, C7, C9, C10	100n	DigiKey	399-5863-ND		
Dit to D128		22p	DigiKey	BC1034CT-ND	Optional	
D258	CD1, CD2, CD3	CDOT1			Optional	if using I2SD, rtcBoB or ChronoDot, Header, 4 pin
D260			DigiKey			
DIL-U1 STP16DP05 DigiKey 3M5479-ND Optional if using rowBoB, 24 pin IC socket						3
J1						
J2					•	· ·
J3		V_IN	DigiKey		Optional	
K1 PWR DigiKey DigiKey SAM1031-50-ND Header, 3 pin, for PWR_SEL * DigiKey XJ8A-0211-ND Jumper socket for PWR_SEL K1 K2 LED_ENABLE DigiKey XJ8A-0211-ND Jumper socket for PWR_SEL K1 * DigiKey XJ8A-0211-ND Jumper socket for LED_ENABLE K2 K3 75eg_Sel K4 SCL DigiKey SAM1031-50-ND Header, 3 pin, Link for INT RTC, OPEN for EXT RTC K4 SCL DigiKey SAM1031-50-ND Header, 3 pin, Link for INT RTC, OPEN for EXT RTC K5 SDA DigiKey SAM1031-50-ND Header, 3 pin, Link for INT RTC, OPEN for EXT RTC K5 SDA DigiKey SAM1031-50-ND Header, 3 pin, Link for INT RTC, OPEN for EXT RTC * DigiKey SAM1031-50-ND Header, 3 pin, Link for INT RTC, OPEN for EXT RTC * DigiKey SAM1031-50-ND Header, 3 pin, Link for INT RTC, OPEN for EXT RTC * DigiKey SAM211-ND Jumper socket for SDL, K3 P1 7 SegDisp Sparkfun COM-09766 Optional	J2	V_IN	DigiKey	ED2982-ND		USB-B, Socket
# Digikey XJ8A-0211-ND Jumper socket for PWR_SEL K1 K2 LED_ENABLE Digikey SAM1031-50-ND Header, 3 pin, for LED_ENABLE K2 * Digikey XJ8A-0211-ND Jumper socket for LED_ENABLE K2 K3 7Seg_Sel Solder Bridge for uC pin selection K4 SCL Digikey XJ8A-0211-ND Jumper socket for SCL, K4 * Digikey XJ8A-0211-ND Jumper socket for SCL, K4 K5 SDA Digikey XJ8A-0211-ND Jumper socket for SCL, K4 K5 SDA Digikey XJ8A-0211-ND Jumper socket for SCL, K4 K5 SDA Digikey XJ8A-0211-ND Jumper socket for SDL, K5 P1 7SegDisp Sparkfun COM-09766 Optional 7 segment 4 digit display P7 FTDI Digikey SAM1043-50-ND Header, 3 pin, Link for INT RTC, OPEN for EXT RTC P13 ISP Digikey SAM1043-50-ND Header, 6 pin, right angle P14 Digikey SAM1095-36-ND Optional Header, 6 pin, right angle P15 STACK-L Digikey SAM1095-36-ND Optional Socket, 4 pin, right angle, for daisy-chaining boards P41 STACK-L Digikey SAM1043-50-ND Optional Header, 4 pin, right angle, for daisy-chaining boards P42 STACK-R Digikey SAM1043-50-ND Optional Header, 4 pin, right angle, for daisy-chaining boards P43 CONN_1 Break Out Pad, no component ATMega Port PC2 PCB Main Board, seeed Q1 to Q17 2N5401 Digikey CF18JT100CT-ND R17, R18, R19, R22, R23, R31, R36, R37, R38 10k Digikey CF18JT100CT-ND R24, R25, R26, 1k Digikey CF18JT100CT-ND	J3	V_IN	DigiKey	CP-002B-ND	Optional	
K2	K1	PWR	DigiKey	SAM1031-50-ND		Header, 3 pin, for PWR_SEL
* DigiKey XJ8A-0211-ND Jumper socket for LED_ENABLE K2 K3 75eg_Sel Solder Bridge for uC pin selection K4 SCL DigiKey SAM1031-50-ND Header, 3 pin, Link for INT RTC, OPEN for EXT RTC K5 SDA DigiKey SAM1031-50-ND Jumper socket for SCL, K4 K5 SDA DigiKey SAM1031-50-ND Header, 3 pin, Link for INT RTC, OPEN for EXT RTC * DigiKey XJ8A-0211-ND Jumper socket for SDL, K5 P1 75egDisp Sparkfun COM-09766 Optional 7 segment 4 digit display P7 FTDI DigiKey SAM1043-50-ND Header, 6 pin, right angle P13 ISP DigiKey SAM1095-36-ND Optional Header, 3x2 pin P24 to P39 DIL6	*		DigiKey	XJ8A-0211-ND		Jumper socket for PWR_SEL K1
K3 7Seg_Sel Solder Bridge for uC pin selection K4 SCL DigiKey SAM1031-50-ND Header, 3 pin, Link for INT RTC, OPEN for EXT RTC * DigiKey XJ8A-0211-ND Jumper socket for SCL, K4 K5 SDA DigiKey SAM1031-50-ND Header, 3 pin, Link for INT RTC, OPEN for EXT RTC * DigiKey XJ8A-0211-ND Jumper socket for SCL, K4 K5 SDA DigiKey SAM1031-50-ND Header, 3 pin, Link for INT RTC, OPEN for EXT RTC * DigiKey XJ8A-0211-ND Jumper socket for SCL, K5 P1 7SegDisp Sparkfun COM-09766 Optional 7 segment 4 digit display P7 FTDI DigiKey SAM1043-50-ND Header, 6 pin, right angle P13 ISP DigiKey SAM1095-36-ND Optional Header, 3x2 pin P24 to P39 DIL6 - Prototyping area hacking area P41 STACK-L DigiKey SAM1095-0ND Optional Socket, 4 pin, right angle, for daisy-chaining boards P42 STACK-R DigiKey SAM1043-50-ND Optional Header, 4 pin, right angle, for daisy-chaining boards P43 CONN_1 - Break Out Pad, no component ATMega Port PC2 PCB1 PCB - Main Board, seeed Q1 to Q17 2N5401 DigiKey SM106X-ND R1 to R16 100 DigiKey CF18JT100RCT-ND R20, R21 4k7 DigiKey CF18JT10K0CT-ND R24, R25, R26, 1k DigiKey CF18JT1K00CT-ND	K2	LED_ENABLE	DigiKey	SAM1031-50-ND		Header, 3 pin, for LED_ENABLE
K4 SCL DigiKey SAM1031-50-ND Header, 3 pin, Link for INT RTC, OPEN for EXT RTC * DigiKey XJ8A-0211-ND Jumper socket for SCL, K4 K5 SDA DigiKey SAM1031-50-ND Header, 3 pin, Link for INT RTC, OPEN for EXT RTC * DigiKey XJ8A-0211-ND Jumper socket for SDL, K5 P1 7SegDisp Sparkfun COM-09766 Optional 7 segment 4 digit display P7 FTDI DigiKey SAM1093-50-ND Header, 6 pin, right angle P13 ISP DigiKey SAM1093-50-ND Optional Header, 3x2 pin P24 to P39 DIL6 Prototyping area hacking area P41 STACK-L DigiKey SAM1009-50-ND Optional Socket, 4 pin, right angle, for daisy-chaining boards P42 STACK-R DigiKey SAM1043-50-ND Optional Header, 4 pin, right angle, for daisy-chaining boards P43 CONN_1 Break Out Pad, no component ATMega Port PC2 PCB1 PCB Main Board, seeed	*		DigiKey	XJ8A-0211-ND		Jumper socket for LED_ENABLE K2
* DigiKey XJ8A-0211-ND Jumper socket for SCL, K4 K5 SDA DigiKey SAM1031-50-ND Header, 3 pin, Link for INT RTC, OPEN for EXT RTC * DigiKey XJ8A-0211-ND Jumper socket for SDL, K5 P1 7SegDisp Sparkfun COM-09766 Optional 7 segment 4 digit display P7 FTDI DigiKey SAM1043-50-ND Header, 6 pin, right angle P13 ISP DigiKey SAM1043-50-ND Optional Header, 3x2 pin P24 to P39 DIL6 Prototyping area hacking area P41 STACK-L DigiKey SAM1095-36-ND Optional Socket, 4 pin, right angle, for daisy-chaining boards P42 STACK-R DigiKey SAM1043-50-ND Optional Header, 4 pin, right angle, for daisy-chaining boards P43 CONN_1 Break Out Pad, no component ATMega Port PC2 PCB1 PCB Main Board, seeed Q1 to Q17 2N5401 DigiKey SN5401GOS-ND R1 to R16 100 DigiKey CF18JT100RCT-ND R24, R25, R26, 1k DigiKey CF18JT1K00CT-ND R24, R25, R26, 1k DigiKey CF18JT1K00CT-ND		7Seg_Sel				Solder Bridge for uC pin selection
K5 SDA Digikey SAM1031-50-ND Header, 3 pin, Link for INT RTC, OPEN for EXT RTC	K4	SCL	DigiKey	SAM1031-50-ND		Header, 3 pin, Link for INT RTC, OPEN for EXT RTC
* DigiKey XJ8A-0211-ND Jumper socket for SDL, K5 P1 7SegDisp Sparkfun COM-09766 Optional 7 segment 4 digit display P7 FTDI DigiKey SAM1043-50-ND Header, 6 pin, right angle P13 ISP DigiKey SAM1095-36-ND Optional Header, 3x2 pin P24 to P39 DIL6 Prototyping area hacking area P41 STACK-L DigiKey SAM1009-50-ND Optional Socket, 4 pin, right angle, for daisy-chaining boards P42 STACK-R DigiKey SAM1043-50-ND Optional Socket, 4 pin, right angle, for daisy-chaining boards P43 CONN_1 Break Out Pad, no component ATMega Port PC2 PCB1 PCB Main Board, seeed Q1 to Q17 2N5401 DigiKey SN5401GOS-ND R1 to R16 100 DigiKey CF18JT100RCT-ND R20, R21 4k7 DigiKey CF18JT10KOCT-ND R24, R25, R26, 1k DigiKey CF18JT1K0OCT-ND R24, R25, R26, 1k DigiKey CF18JT1K0OCT-ND	*		DigiKey	XJ8A-0211-ND		Jumper socket for SCL, K4
P1 7SegDisp Sparkfun COM-09766 Optional 7 segment 4 digit display	K5	SDA	DigiKey	SAM1031-50-ND		Header, 3 pin, Link for INT RTC, OPEN for EXT RTC
P7 FTDI DigiKey SAM1043-50-ND Header, 6 pin, right angle P13 ISP DigiKey SAM1095-36-ND Optional Header, 3x2 pin P24 to P39 DIL6 Prototyping area hacking area P41 STACK-L DigiKey SAM1009-50-ND Optional Socket, 4 pin, right angle, for daisy-chaining boards P42 STACK-R DigiKey SAM1043-50-ND Optional Header, 4 pin, right angle, for daisy-chaining boards P43 CONN_1 Break Out Pad, no component ATMega Port PC2 PCB1 PCB Main Board, seeed Q1 to Q17 2N5401 DigiKey 2N5401GOS-ND R1 to R16 100 DigiKey CF18JT100RCT-ND R17, R18, R19, R22, R23, R31, R36, R37, R38 10k DigiKey CF18JT10KOCT-ND R20, R21 4k7 DigiKey CF18JT1K00CT-ND R24, R25, R26, 1k DigiKey CF18JT1K00CT-ND	*		DigiKey	XJ8A-0211-ND		Jumper socket for SDL, K5
P13 ISP DigiKey SAM1095-36-ND Optional Header, 3x2 pin P24 to P39 DIL6 Prototyping area hacking area P41 STACK-L DigiKey SAM1009-50-ND Optional Socket, 4 pin, right angle, for daisy-chaining boards P42 STACK-R DigiKey SAM1043-50-ND Optional Header, 4 pin, right angle, for daisy-chaining boards P43 CONN_1 Break Out Pad, no component ATMega Port PC2 PCB1 PCB Main Board, seeed Q1 to Q17 2N5401 DigiKey 2N5401GOS-ND R1 to R16 100 DigiKey CF18JT100RCT-ND R17, R18, R19, R22, R23, R31, R36, R37, R38 10k DigiKey CF18JT10K0CT-ND R20, R21 4k7 DigiKey CF18JT1K00CT-ND R24, R25, R26, 1k DigiKey CF18JT1K00CT-ND	P1	7SegDisp	Sparkfun	COM-09766	Optional	7 segment 4 digit display
P24 to P39 DIL6 Prototyping area hacking area P41 STACK-L DigiKey SAM1009-50-ND Optional Socket, 4 pin, right angle, for daisy-chaining boards P42 STACK-R DigiKey SAM1043-50-ND Optional Header, 4 pin, right angle, for daisy-chaining boards P43 CONN_1 Break Out Pad, no component ATMega Port PC2 PCB1 PCB Main Board, seeed Q1 to Q17 2N5401 DigiKey 2N5401GOS-ND R1 to R16 100 DigiKey CF18JT100RCT-ND R17, R18, R19, R22, R23, R31, R36, R37, R38 10k DigiKey CF18JT10K0CT-ND R20, R21 4k7 DigiKey CF18JT4K70CT-ND R24, R25, R26, 1k DigiKey CF18JT1K00CT-ND	P7	FTDI	DigiKey	SAM1043-50-ND		Header, 6 pin, right angle
P41 STACK-L DigiKey SAM1009-50-ND Optional Socket, 4 pin, right angle, for daisy-chaining boards P42 STACK-R DigiKey SAM1043-50-ND Optional Header, 4 pin, right angle, for daisy-chaining boards P43 CONN_1 Break Out Pad, no component ATMega Port PC2 PCB1 PCB Main Board, seeed Q1 to Q17 2N5401 DigiKey 2N5401GOS-ND R1 to R16 100 DigiKey CF18JT100RCT-ND R17, R18, R19, R22, R23, R31, R36, R37, R38 10k DigiKey CF18JT10K0CT-ND R20, R21 4k7 DigiKey CF18JT4K70CT-ND R24, R25, R26, 1k DigiKey CF18JT1K00CT-ND	P13	ISP	DigiKey	SAM1095-36-ND	Optional	Header, 3x2 pin
P42 STACK-R DigiKey SAM1043-50-ND Optional Header, 4 pin, right angle, for daisy-chaining boards P43 CONN_1 Break Out Pad, no component ATMega Port PC2 PCB1 PCB Main Board, seeed Q1 to Q17 2N5401 DigiKey 2N5401GOS-ND R1 to R16 100 DigiKey CF18JT100RCT-ND R17, R18, R19, R22, R23, R31, R36, R37, R38 10k DigiKey CF18JT10KOCT-ND R20, R21 4k7 DigiKey CF18JT4K70CT-ND R24, R25, R26, 1k DigiKey CF18JT1K00CT-ND	P24 to P39	DIL6		Prototyping area		hacking area
P43 CONN_1 Break Out Pad, no component ATMega Port PC2 PCB1 PCB Main Board, seeed Q1 to Q17 2N5401 DigiKey 2N5401GOS-ND R1 to R16 100 DigiKey CF18JT100RCT-ND R17, R18, R19, R22, R23, R31, R36, R37, R38 10k DigiKey CF18JT10K0CT-ND R20, R21 4k7 DigiKey CF18JT4K70CT-ND R24, R25, R26, 1k DigiKey CF18JT1K00CT-ND	P41	STACK-L	DigiKey	SAM1009-50-ND	Optional	Socket, 4 pin, right angle, for daisy-chaining boards
PCB1 PCB Main Board, seeed Q1 to Q17 2N5401 DigiKey 2N5401GOS-ND R1 to R16 100 DigiKey CF18JT100RCT-ND R17, R18, R19, R22, R23, R31, R36, R37, R38 10k DigiKey CF18JT10K0CT-ND R20, R21 4k7 DigiKey CF18JT4K70CT-ND R24, R25, R26, 1k DigiKey CF18JT1K00CT-ND		STACK-R	DigiKey	SAM1043-50-ND	Optional	Header, 4 pin, right angle, for daisy-chaining boards
Q1 to Q17 2N5401 DigiKey 2N5401GOS-ND R1 to R16 100 DigiKey CF18JT100RCT-ND R17, R18, R19, R22, R23, R31, R36, R37, R38 10k DigiKey CF18JT10K0CT-ND R20, R21 4k7 DigiKey CF18JT4K70CT-ND R24, R25, R26, 1k DigiKey CF18JT1K00CT-ND				<u> </u>		ATMega Port PC2
R1 to R16 100 DigiKey CF18JT100RCT-ND R17, R18, R19, R22, R23, R31, R36, R37, R38 10k DigiKey CF18JT10K0CT-ND R20, R21 4k7 DigiKey CF18JT4K70CT-ND R24, R25, R26, 1k DigiKey CF18JT1K00CT-ND				·		
R17, R18, R19, R22, R23, R31, R36, R37, R38	, ,					
R20, R21 4k7 DigiKey CF18JT4K70CT-ND R24, R25, R26, 1k DigiKey CF18JT1K00CT-ND	R1 to R16	100	DigiKey	CF18JT100RCT-ND		
R24, R25, R26, 1k DigiKey CF18JT1K00CT-ND	R17, R18, R19, R22, R23, R31, R36, R37, R38			CF18JT10K0CT-ND		
	·			CF18JT4K70CT-ND		
R30 100F DigiKey CF18 JT100RCT-ND	R24, R25, R26,	1k		CF18JT1K00CT-ND		
1002 Digney of 1001 100101	R30	100E	DigiKey	CF18JT100RCT-ND		
R32 LDR DigiKey PDV-P9007-ND Optional or add 2 pin socket	R32	LDR	DigiKey	PDV-P9007-ND	Optional	or add 2 pin socket
R33, R35 680E DigiKey CF18JT680RCT-ND	R33, R35	680E	DigiKey	CF18JT680RCT-ND		
R34 2k DigiKey CF18JT2K00CT-ND	R34	2k	DigiKey	CF18JT2K00CT-ND		
SP1 SPEAKER DigiKey 102-1169-ND	SP1	SPEAKER	DigiKey	102-1169-ND		
SW1 INC DigiKey 450-1657-ND	SW1	INC	DigiKey	450-1657-ND		

C3Jr_v2: PARTS LIST (BoM)

ref	value	Vendor	Vendor P/N	NOTE1	NOTE 2
SW2	DEC	DigiKey	450-1657-ND		
SW3	MODE	DigiKey	450-1657-ND		
SW4	RST	DigiKey	450-1657-ND		
SW5	ENTER	DigiKey	450-1657-ND		
SW12	INC	DigiKey	450-1650-ND	Optional	for rear mount, in place of SW1
SW22	DEC	DigiKey	450-1650-ND	Optional	for rear mount, in place of SW2
SW32	MODE	DigiKey	450-1650-ND	Optional	for rear mount, in place of SW3
SW42	RST	DigiKey	450-1650-ND	Optional	for rear mount, in place of SW4
SW52	ENTER	DigiKey	450-1650-ND	Optional	for rear mount, in place of SW5
U1	STP8DP05	DigiKey	497-6271-5-ND		
*	Socket STP8DP05	DigiKey	A100206-ND		Socket for IC
U2	7805	DigiKey	MC7805CTGOS-ND	Optional	if using wall wart with >5V output
U3	ATMEGA8-P	DigiKey	ATMEGA328-PU-ND		
*	Socket ATMEGA8-P	DigiKey	A100210-ND		Socket for IC
U4	74HC154	DigiKey	568-1407-5-ND		
*	Socket 74HC154	DigiKey	3M5479-ND		Socket for IC
U6	DS3231N	DigiKey	DS3231S#-ND		
X1	16MHz	DigiKey	X908-ND		

OTHER PARTS		
BF1	BAFFLE	Angus Hines
BP1	BackPlate	Angus Hines
FM1	FRAME	Ikea or None
FP1	FacePlate	Angus Hines
P8	CONN_1	Fixing Screw for Board
P9	CONN_1	Fixing Screw for Board
P10	CONN_1	Fixing Screw for Board
P11	CONN_1	Fixing Screw for Board
P14	CONN_1	Fixing Screw for Baffle
P15	CONN_1	Fixing Screw for Baffle
P49	CONN_1	Fixing Screw for rtcBoB
P50	CONN_1	Fixing Screw for rtcBoB
P51	CONN_1	Fixing Screw for rtcBoB
P52	CONN_1	Fixing Screw for rtcBoB
P53	CONN_1	Fixing Screw for Baffle
P54	CONN_1	Fixing Screw for Baffle
rowBoB1	CONN_1	Fixing Screw for rowBoB