










# Base4 Clock Bill Of Material

The following list of parts has been built from items available on Digikey as of July 2015. The quantities are calculated to produce one Base4Clock v1.2 circuit board.

Part Number	Qty	Description	Image
ATMEGA328P-PU-ND	1	IC MCU 8BIT 32KB FLASH 28DIP	
DS1307+-ND	1	IC RTC CLK/CALENDAR I2C 8-DIP	
450-1158-ND	4	SWITCH TACTILE SPST-NO 0.05A 24V	
MC7805CT-BPMS-ND	1	IC REG LDO 5V 1.5A TO220	
P5138-ND	1	CAP ALUM 100UF 20% 16V RADIAL	
493-1057-ND	1	CAP ALUM 10UF 20% 25V RADIAL	
732-5010-ND	1	WL-TMRC THT LED ROUND COLOR DIFF	
1125-1186-ND	1	LED GRN 572NM DIFF 3MM RND	

10KQBK-ND	5	RES 10K OHM 1/4W 5% AXIAL	
CF14JT2K20CT-ND	2	RES 2.2K OHM 1/4W 5% CARBON FILM	
220QBK-ND	2	RES 220 OHM 1/4W 5% AXIAL	
BK-890-ND	1	RETAINER COIN 12MM W/PC PINS	
CTX1085-ND	1	CRYSTAL 16.0000MHZ 18PF T/H	
535-9034-ND	1	CRYSTAL 32.7680KHZ 12.5PF T/H	
CP-002A-ND	1	CONN POWER JACK 2.1MM	
ED2741-ND	1	TERMINAL BLOCK 3.5MM 3POS PCB	
HS106-ND	1	HEAT SINK TO-220 .375" COMPACT	
609-3263-ND	1	CONN HEADER 6POS .100 STR TIN	

AE9986-ND	1	CONN IC DIP SOCKET 8POS TIN	
ED3050-5-ND	1	CONN IC DIP SOCKET 28POS TIN	
450-1650-ND	1	SWITCH TACTILE SPST-NO 0.05A 24V	
478-3162-ND	2	CAP CER 22PF 200V 10% RADIAL	
399-4264-ND	3	CAP CER 0.1UF 50V 10% RADIAL	
SW260-ND	1	CAP TACTILE SQUARE RED	
SW259-ND	1	CAP TACTILE SQUARE WHITE	
SW957-ND	1	CAP TACTILE SQUARE GREEN	
SW455-ND	1	CAP TACTILE SQUARE BLACK	
LED Strip	1	WS2811	
6V 800mA Adapter	1	6V - 800mA Power Adapter with 2.1mm Jack	

PCB	1		
HEX M3-6 Bolt	1		
HEX M3 Nut	1		
CR1220 3.7V Battery	1		

## LED Pixels Strip

The LED pixels strip must be built with addressable LED based on the WS2811 LED controller chip. You can find these on [eBay](#) or [Amazon](#).

## Power Adapter

To power the clock you need a 6V power adapter providing at least 800mA with a 2.1x10mm power connector.