# Word Clock BOM

| Part | Value | Description | Package |
|------|-------|-------------|---------|
| IC1 | ATMEGA32-A | MICROCONTROLLER | TQFP44 |
| IC2 | HT7333 | Low Dropout voltage regulator 3.3v | SOT-89 |
| IC3 | DS3231 | Real Time Clock | SOIC-16W |
| IC4 | MCP73831 | MCP73831T Li-Ion, Li-Po Controller | SOT23-5 |
| R1, R10 | 10k | Resistor | 0805 |
| R2, R7 | 330 | Resistor | 0805 |
| R3 | 2k | Resistor | 0805 |
| R4 | 100k | Resistor | 0805 |
| R5 | 330k | Resistor | 0805 |
| R6 | 390 | Resistor | 0805 |
| R8, R9 | 4,7k | Resistor | 0805 |
| RN1, RN2 | 390 | Array Chip Resistor | 0603-ARC |
| C1, C2, C4, C7, C8 | 0.1u | Capacitor | 0805 |
| C3 | 47u | Tantalum Capacitor | D / 7343 |
| C5, C6 | 4.7u | Capacitor | 0805 |
| LED1 | Green | LED | 1206 |
| LED2 | Red | LED | 1206 |
| LED3 | 1588ABEG-5_8X8-LED_MATRIX | 8x8 dot matrix display, green and red | 1588ABEG-5 |
| J1 | LiPo battery connector | 0.1 inch spaced header connections | MOLEX-1X2 |
| J2, J3, J4, J6, J7, J8 | | 0.1 inch spaced header connections | 1X02 |
| J5, J9 | | 0.1 inch spaced header connection | 1X01 |
| J10 | USB MICRO B | USB connector SMD package | USB-MICRO B SMD |
| JP1 | 6 pin AVR ICSP right angle connector | 0.1 inch spaced header connections | 2X03 /90° |
| S1 | Momentary button 6.mm THT | Momentary Switch (Pushbutton) - SPST | 6.0MM |