

## Parts List

- 1 PC board, 130mm x 102mm
- 1 Plastic Box 140x110x35 mm  
(Multicomp G378A, Jaycar HB-5970, Altronics H0472, Element14 1526699)
- 1 SD (Secure Digital memory card) connector  
(Hirose DM1A, Element14 1764372, 4UCON 19607)
- 1 USB B Type Socket PCB mounting  
(Jaycar PS-0920, Altronics P1307, Element14 1696537)
- 1 DE-15 (or HD-15) High Density 15 Pin Female D Connector  
(AMP 1-1734530-1, MULTICOMP SPC15430, Element14 1557991 or 1564252)
- 1 8MHz Crystal (low profile)
- 1 IDC 26 pin boxed header PCB mount 90° pins
- 1 6 Pin Mini DIN Female Connector (socket) PCB mounting
- 1 DC power socket 2.1mm PCB mounting
- 1 3.5mm Stereo Phono Socket, Panel Mount, Solder tabs
- 1 Micro Tactile Push Button Switch
- 2 Single Row 3 Pin Header 0.1 inch (male)
- 1 3 Pin Polarised Header Plug 0.1" PCB mount
- 1 3 Pin Polarised Header Socket to suit above
- 2 8 Pin Header Socket (eg, Jaycar HM3207)
- 2 6 Pin Header Socket (eg, Jaycar HM3207)
- 1 Type 6073 Mini TO-220 Heatsink (19 mm high) plus suitable screw and bolt
- 4 M3 metal thread screws (or self tappers) 4mm long

## Semiconductors

- 1 PIC32MX695F512L-80I/PF or PIC32MX795F512L-80I/PF microcontroller (IC1)  
(Microchip Direct, Element14 1778489 or 1778491)
- 1 7805 Voltage Regulator T0-220 Package 5.0 Volts (IC2)
- 1 TC1262-3.3VAB Voltage Regulator T0-220 Package 3.3 Volts (IC3)  
(Microchip Direct, Element14 1852182)
- 1 1N4004 or general purpose silicon power diode (D1)
- 2 IN5819 Schottky diode (D2, D3)
- 3 1N4148 or general purpose low power silicon diode (D4, D5, D6)
- 1 Green LED, 3mm (D7)
- 1 Red LED, 3mm (D8)

## Capacitors

- 2 22pF Ceramic
- 2 47nF MKT or polyester
- 7 100nF Monolithic
- 1 330nF MKT
- 2 10µF 25V Tantalum
- 1 10µF 16V Ceramic X5R SMD 0805 package (Element14 [1845747](#).)

## Resistors (0.25W 5%)

- |         |       |        |         |
|---------|-------|--------|---------|
| 1 2.2 Ω | 1 10Ω | 3 120Ω | 2 4.7KΩ |
| 2 47Ω   | 5 1KΩ | 1 10KΩ |         |

## Parts List (Battery Backed Clock Option)

- 1 Coin cell battery holder (futuralec.com COINHOLDER, Element14 2064715)
- 1 CR2032 Lithium Battery
  - or
- 1 CR2032 Lithium Battery PCB Mount  
(Jaycar CR-2032VC, futuralec.com CR2032VBE, Element14 189267001)
- 1 32.768KHz Watch Crystal

### Semiconductors

- 1 DS1307 Real Time Clock 8 pin PDIP package  
(futuralec.com DS1307, Element14 1188042)

### Capacitors

- 1 100nF Ceramic or MKT

### Resistors (0.25W 5%)

- 2 10K $\Omega$