

eZ430-Chronos Watch BOM, 868, V1.2c - white PCB

| <u>Designator</u> | <u>Value</u> | <u>Tolerance</u> | <u>Footprint</u> | <u>Description</u> | <u>Manufacturer</u> |
|-------------------|-----------------------------|------------------|------------------|-----------------------------|-----------------------------|
| C1 | 47uF | +20% | TAJ-A | Capacitor SMD | Tantalum, height max. 1.6mm |
| C2 | 47uF | +20% | TAJ-A | Capacitor SMD | |
| C3 | 47uF | +20% | TAJ-A | Capacitor SMD | |
| C4 | 4.7uF | +20%, X5R | 603 | Capacitor SMD | |
| C5 | 470nF | +10%, X5R | 402 | Capacitor SMD | Tantalum, height max. 1.6mm |
| C6 | 100nF | +10%, X5R or X7R | 402 | Capacitor SMD | |
| C7 | 100nF | +10%, X5R or X7R | 402 | Capacitor SMD | |
| C8 | 15pF | +5%, COG/NP0 | 402 | Capacitor SMD | |
| C9 | 15pF | +5%, COG/NP0 | 402 | Capacitor SMD | |
| C10 | 10nF | +10%, X7R | 402 | Capacitor SMD | |
| C11 | 2.2pF | +0.25pF, COG/NP0 | 402 | Capacitor SMD | |
| C12 | 10nF | +10%, X7R | 402 | Capacitor SMD | |
| C13 | 220pF | +10%, COG/NP0 | 402 | Capacitor SMD | |
| C14 | 100nF | +10%, X5R or X7R | 402 | Capacitor SMD | |
| C15 | 100nF | +10%, X5R or X7R | 402 | Capacitor SMD | |
| C16 | 100nF | +10%, X5R or X7R | 402 | Capacitor SMD | |
| C17 | na | | | | |
| C18 | na | | | | |
| C19 (R) | 0R | +5% | 402 | Resistor SMD | |
| C20 | 100nF | +10%, X5R or X7R | 402 | Capacitor SMD | |
| C21 | 100nF | +10%, X5R or X7R | 402 | Capacitor SMD | |
| C22 | 2.2nF | +10%, X7R | 402 | Capacitor SMD | |
| C23 | 100nF | +10%, X5R or X7R | 402 | Capacitor SMD | |
| D1 | 1SS355 | | SOD323 | Diode SMD | Johanson L-07C12NJV4 |
| D2 | 1SS355 | | SOD323 | Diode SMD | |
| L1 | 12nH | +5% | 402 | Inductor Monolithic SMD | |
| L2 (R) | 0R | +5% | 402 | Resistor SMD | |
| L3 (R) | 0R | +5% | 402 | Resistor SMD | |
| L4 | 35mH, RDC<=250Ohm, IDC>=1mA | +10% | | Inductor Coil | |
| L5 | 100nH | +10% | 402 | Inductor Monolithic SMD | |
| L6 | 4mH, RDC<=100Ohm, IDC>=10mA | +10% | | Inductor Coil | |
| P1 | Female Header 1.27mm | | | Connector SMD | e.g. MPE-Garry BL SMD 91-06 |
| PCB1 | CUSTOM, solder stop white | | | PCB, 4 layers, 0.6 mm thick | |
| Q1 | BC846BW or BC847BW | | SOT323 | Bipolar Transistor NPN SMD | |
| Q2 | BC846BW or BC847BW | | SOT323 | Bipolar Transistor NPN SMD | |
| Q3 | BC846BW or BC847BW | | SOT323 | Bipolar Transistor NPN SMD | |
| Q4 | BC846BW or BC847BW | | SOT323 | Bipolar Transistor NPN SMD | |
| Q5 | NTR4101P | | SOT23 | P-Channel MOSFET SMD | |
| R1 | 470R | +5% | 402 | Resistor SMD | |
| R2 | 47k | +5% | 402 | Resistor SMD | |
| R3 | 56k | +1% | 402 | Resistor SMD | |
| R4 | 47k | +5% | 402 | Resistor SMD | |
| R5 | 10k | +5% | 402 | Resistor SMD | |

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|----|-----------------------------------|--------|---------------|--------------------------|-------------------------------|
| R6 | 10k | +5% | 402 | Resistor SMD | |
| R7 | 10k | +5% | 402 | Resistor SMD | |
| R8 | 10k | +5% | 402 | Resistor SMD | |
| R9 | 100k | +5% | 402 | Resistor SMD | |
| U1 | CC430F6137IRGC | | QFN64 | MCU with ISM Transceiver | TI |
| U2 | 0868BM15C0001 | | | Balun 868MHz | Johanson |
| U3 | BMA250 | | LGA12 | Acceleration Sensor SPI | Bosch Sensortec |
| U4 | HKA5403Q-30 | | DIE | EL Driver | |
| U5 | BMP085 | | | Pressure Sensor I2C | Bosch Sensortec |
| Y1 | 32.768kHz, CL=12.5pF, ESR<=80kOhm | +20ppm | 3.2 x 1.5 mm2 | Crystal SMD | Microcrystal CM7V-T1A |
| Y2 | 26MHz, CL=10pF, ESR<=40Ohm | +10ppm | 3.2 x 2.5 mm2 | Crystal SMD | Epson TSX3225-X1E000021014300 |