

## eZ430-Chronos Access Point, 433 V1.1d BOM - white PCB

| <u>Designator</u> | <u>Value</u>              | <u>Tolerance</u> | <u>Footprint</u> | <u>Description</u>          | <u>Manufacturer</u>                        |
|-------------------|---------------------------|------------------|------------------|-----------------------------|--------------------------------------------|
| C1                | 2.2nF                     | +10%, X7R        | 402              | Capacitor SMD               | Johanson 500R07S1R8BV4                     |
| C2                | 100nF                     | +10%, X5R or X7R | 402              | Capacitor SMD               |                                            |
| C3                | 100nF                     | +10%, X5R or X7R | 402              | Capacitor SMD               |                                            |
| C4                | 100nF                     | +10%, X5R or X7R | 402              | Capacitor SMD               |                                            |
| C5                | 470nF                     | +10%, X5R        | 402              | Capacitor SMD               |                                            |
| C6                | 220nF                     | +10%, X5R        | 402              | Capacitor SMD               |                                            |
| C7                | 220nF                     | +10%, X5R        | 402              | Capacitor SMD               |                                            |
| C8                | 100nF                     | +10%, X5R or X7R | 402              | Capacitor SMD               |                                            |
| C9                | 100nF                     | +10%, X5R or X7R | 402              | Capacitor SMD               |                                            |
| C10               | 100nF                     | +10%, X5R or X7R | 402              | Capacitor SMD               |                                            |
| C11               | 100nF                     | +10%, X5R or X7R | 402              | Capacitor SMD               |                                            |
| C12               | 100nF                     | +10%, X5R or X7R | 402              | Capacitor SMD               |                                            |
| C13               | 100nF                     | +10%, X5R or X7R | 402              | Capacitor SMD               |                                            |
| C14               | 100nF                     | +10%, X5R or X7R | 402              | Capacitor SMD               |                                            |
| C15               | 15pF                      | +5%, COG/NP0     | 402              | Capacitor SMD               |                                            |
| C16               | 15pF                      | +5%, COG/NP0     | 402              | Capacitor SMD               |                                            |
| C17               | na                        |                  |                  |                             |                                            |
| C18               | 1.8pF                     | +0.1pF, COG/NP0  | 402              | Capacitor SMD               | Johanson                                   |
| C20               | 10pF                      | +5%, COG/NP0     | 402              | Capacitor SMD               |                                            |
| C21               | 10pF                      | +5%, COG/NP0     | 402              | Capacitor SMD               |                                            |
| C22               | 100nF                     | +10%, X5R or X7R | 402              | Capacitor SMD               |                                            |
| C23               | 1.0uF                     | +10%, X5R        | 402              | Capacitor SMD               |                                            |
| C24               | 100nF                     | +10%, X5R or X7R | 402              | Capacitor SMD               |                                            |
| C25               | 1.0uF                     | +10%, X5R        | 402              | Capacitor SMD               |                                            |
| D1                | green                     |                  | 603              | LED SMD                     |                                            |
| E1                | 0433AT62A0020             |                  |                  | Chip Antenna 433MHz         | Johanson L-07C18NV6<br>e.g. Lumberg 241007 |
| L1                | 18nH                      | +5%              | 402              | Inductor Monolithic SMD     |                                            |
| P1                | USB Type A                |                  |                  | USB Plug                    | TI                                         |
| PCB1              | CUSTOM, solder stop white |                  |                  | PCB, 4 layers, 0.8 mm thick |                                            |
| R1                | 47k                       | +5%              | 402              | Resistor SMD                |                                            |
| R2                | 270R                      | +5%              | 402              | Resistor SMD                |                                            |
| R3                | na                        |                  |                  |                             |                                            |
| R4                | 1M                        | +5%              | 402              | Resistor SMD                |                                            |
| R5                | 1.4k                      | +5%              | 402              | Resistor SMD                |                                            |
| R6                | 27R                       | +5%              | 402              | Resistor SMD                |                                            |
| R7                | 27R                       | +5%              | 402              | Resistor SMD                |                                            |
| R8                | 100R                      | +5%              | 402              | Resistor SMD                |                                            |
| R9                | 56k                       | +1%              | 402              | Resistor SMD                | TI                                         |
| R10               | 0R                        | +5%              | 402              | Resistor SMD                |                                            |
| R11               | 0R                        | +5%              | 402              | Resistor SMD                |                                            |
| U1                | MSP430F5509IRGZR          |                  | QFN48            | MCU                         |                                            |
| U2                | CC1101RTKR                |                  | QLP20            | ISM Transceiver             |                                            |
| U3                | 0433BM15A0001             |                  |                  | Balun 433MHz                |                                            |

|    |                                   |          |               |                  |                               |
|----|-----------------------------------|----------|---------------|------------------|-------------------------------|
| U4 | TPD2E001DRLR                      |          | DRL5          | ESD Protection   | TI                            |
| U5 | TPS78225DDCR                      |          | TSOT23-5      | Linear Regulator | TI                            |
| Y1 | 26MHz, CL=10pF, ESR<=40Ohm        | +/-10ppm | 3.2 x 2.5 mm2 | Crystal SMD      | Epson TSX3225-X1E000021014300 |
| Y2 | 32.768kHz, CL=12.5pF, ESR<=80kOhm | +/-20ppm | 1.5x1.5x6.7mm | Crystal SMD      | MicroCrystal MS3V-T1R         |