

| Item | Qty. | Ref.                                              | Part                                                                               | PCB Footprint           | Part #/man.              | Alt Part #/man.     |
|------|------|---------------------------------------------------|------------------------------------------------------------------------------------|-------------------------|--------------------------|---------------------|
| 1    | 1    | A1                                                | All capacitors are type NPO unless otherwise noted                                 |                         |                          |                     |
| 2    | 1    | A2                                                | All resistors, capacitors, and inductors have 5% tolerances unless otherwise noted |                         |                          |                     |
| 3    | 1    | A3                                                | All capacitor voltages are 16v or greater unless otherwise noted                   |                         |                          |                     |
| 4    | 1    | BT1                                               | CR1632 FH                                                                          | CR1616&CR1632-2PIN      | same/Renata              |                     |
| 5    | 3    | C1,C2,C17                                         | 100n X7R                                                                           | C_0603S                 |                          |                     |
| 6    | 2    | C11,C3                                            | 2.2n                                                                               | C_0603S                 |                          |                     |
| 7    | 2    | C4,C5                                             | 47p                                                                                | C_0402S                 |                          |                     |
| 8    | 2    | C6,C10                                            | 470p                                                                               | C_0603S                 |                          |                     |
| 9    | 1    | C7                                                | 100p                                                                               | C_0402S                 |                          |                     |
| 10   | 1    | C8                                                | 27p                                                                                | C_0402S                 |                          |                     |
| 11   | 1    | C9                                                | 7.50p                                                                              | SM/4X4.5_TRM_CAP        | TZBX4R500AA110T00/Murata |                     |
| 12   | 1    | C12                                               | 220p                                                                               | c_0402s                 |                          |                     |
| 13   | 1    | C13                                               | 8.2p                                                                               | c_0402s                 |                          |                     |
| 14   | 1    | C14                                               | 56p                                                                                | C_0402S                 |                          |                     |
| 15   | 1    | C15                                               | 3.9p                                                                               | C_0402S                 |                          |                     |
| 16   | 1    | C16                                               | 12p                                                                                | C_0402S                 |                          |                     |
| 17   | 1    | C18                                               | 47n X7R                                                                            | C_0603S                 |                          |                     |
| 18   | 1    | C19                                               | 820p                                                                               | C_0603S                 |                          |                     |
| 19   | 1    | C20                                               | 1uF Tantlum                                                                        | TANT_C_3216             |                          |                     |
| 20   | 2    | C23,C21                                           | 10p                                                                                | C_0402S                 |                          |                     |
| 21   | 1    | C22                                               | 33p                                                                                | C_0402S                 |                          |                     |
| 22   | 1    | L1                                                | 1m                                                                                 | CTC-0118-102            | CTC-0118-102/Coiltech    |                     |
| 23   | 1    | L2                                                | 22nH                                                                               | L_1008S                 | 1008cs-220xjbc/Coilcraft |                     |
| 24   | 3    | Q1,Q3,Q5                                          | MMBT2484LT1                                                                        | SM/SOT23_123            | same/Motorola            |                     |
| 25   | 1    | Q2                                                | MMBT5087LT1                                                                        | SM/SOT23_123            | same/motorola            |                     |
| 26   | 1    | Q4                                                | MMBTH10LT1                                                                         | SM/SOT23_123            | same/motorola            |                     |
| 27   | 2    | R1,R2                                             | 10k                                                                                | R_0402S                 |                          |                     |
| 28   | 13   | R3,R4,R5,R6,R8,R9,R10,<br>R11,R12,R19,R23,R25,R29 | 10Meg                                                                              | R_0603S                 |                          |                     |
| 29   | 6    | R7,R13,R16,R17,R20,R27                            | 2.2Meg                                                                             | R_0402S                 |                          |                     |
| 30   | 2    | R14,R15                                           | 0 ohm                                                                              | R_0402S                 |                          |                     |
| 31   | 2    | R18,R26                                           | 4.75Meg 1%                                                                         | R_0603S                 |                          |                     |
| 32   | 1    | R21                                               | 100K                                                                               | R_0402S                 |                          |                     |
| 33   | 1    | R22                                               | 820 ohm                                                                            | R_0402S                 |                          |                     |
| 34   | 1    | R24                                               | 1.5Meg                                                                             | R_0402S                 |                          |                     |
| 35   | 1    | R28                                               | 470k                                                                               | R_0402S                 |                          |                     |
| 36   | 1    | R30                                               | 6.8Meg                                                                             | R_0603S                 |                          |                     |
| 37   | 2    | U1,U3                                             | MBT3904DW1T1                                                                       | SOT363                  | same/Motorola            | SMBT3904S/Infineon  |
| 38   | 2    | U2,U7                                             | MBT3946DW1T1                                                                       | SOT363                  | same/Motorola            | SMBT3904PN/Infineon |
| 39   | 2    | U4,U5                                             | MBT3906DW1T1                                                                       | SOT363                  | same/Motorola            | SMBT3906S/Infineon  |
| 40   | 1    | U6                                                | BU4093BFV                                                                          | ROHM 4093BFV            | BU4093BFV/Rohm           |                     |
| 41   | 1    | U8                                                | CD4017BCM                                                                          | SOG.050/16/WG.244/L.400 | Same/Fairchild           | MC14017BD/Motorola  |
| 42   | 1    | U9                                                | 12LC508A-04/SN                                                                     | PIC 12LC508A-04/SN      | same/Microchip           |                     |
| 43   | 1    | Y1                                                | RO2101A - 433.92MHz                                                                | RFM-SM2                 | Same/RFM                 |                     |
| 44   | 1    | Y2                                                | C-2 83.000KC-P                                                                     | EA 83KHZ                | Same/Epson America       |                     |