

| A                        | B                  | C                              | D        | E      |
|--------------------------|--------------------|--------------------------------|----------|--------|
| <b>Bill Of Materials</b> |                    |                                |          |        |
| Line #                   | Designator         | Comment                        | Quantity | Value  |
| 1                        | C1, C4, C13, C21   | TDK CD12-E2GA222MYNS           | 4        | 2.2nF  |
| 2                        | C2, C3             | EPCOS B32922C3104              | 2        | 100nF  |
| 3                        | C5, C6, C26        | EPCOS C2012X7R1H104K           | 3        | 100nF  |
| 4                        | C7, C8, C9         | ETHER C3216X7R1H105K           | 3        | 1uF    |
| 5                        | C10                | TDK C3216C0G2J22J115A A        | 1        | 2.2nF  |
| 6                        | C11                | RUBYCON 400BXC68MEFC18X25      | 1        | 68uF   |
| 7                        | C12, C14, C17      | EPCOS B41827A6226M000          | 3        | 22uF   |
| 8                        | C15                | MURATA GA355QR7GF222KW0 1L     | 1        | 2.2nF  |
| 9                        | C16                | EPCOS B37871K5221J60           | 1        | DNP    |
| 10                       | C18                | EPCOS B41856A5108M000          | 1        | 1000uF |
| 11                       | C19                | EPCOS B41856A5337M008          | 1        | 330uF  |
| 12                       | C20, C23           | EPCOS B37872K5223K60           | 2        | 22nF   |
| 13                       | C22                | EPCOS B37940K51102J60          | 1        | 1nF    |
| 14                       | C24, C27           | EPCOS CL31B473KBCNNNC          | 2        | 47nF   |
| 15                       | C25                | EPCOS B32529C0102K000          | 1        | 1nF    |
| 16                       | C28, C29           | EPCOS B32794D2106              | 2        | 10uF   |
| 17                       | D1                 | M7                             | 1        |        |
| 18                       | D2, D5, D8         | ES1D                           | 3        |        |
| 19                       | D3, D6             | BZV55C15V                      | 2        |        |
| 20                       | D4                 | STTH112                        | 1        |        |
| 21                       | D7                 | V30100C                        | 1        |        |
| 22                       | D9                 | BZV55C22V                      | 1        |        |
| 23                       | IC1                | TPS71501                       | 1        |        |
| 24                       | IC2                | ICE3BR1765J                    | 1        |        |
| 25                       | L1                 | Coupled Inductors              | 1        | 1mH    |
| 26                       | L2                 | 2 Primary, 3 Secondary, Shield | 1        |        |
| 27                       | L3, L4             | Inductor                       | 2        | 10nH   |
| 28                       | L5                 | Coupled Inductors              | 1        | 10mH   |
| 29                       | L6                 | Coupled Inductors              | 1        | 10mH   |
| 30                       | L7                 | Coupled Inductors              | 1        | 10mH   |
| 31                       | P1, P7             | WF-4                           | 2        |        |
| 32                       | P2, P3, P4, P6     | Faston 5mm PCB                 | 4        |        |
| 33                       | P5                 | XY2500R-A-3P                   | 1        |        |
| 34                       | P8                 | WF-5                           | 1        |        |
| 35                       | P9                 | WF-2                           | 1        |        |
| 36                       | Q1                 | IPx65R110CFD                   | 1        |        |
| 37                       | R1, R6             | Shunt Resistor Kelvin          | 2        | 20m    |
| 38                       | R2, R3, R4, R5, R9 | Resistor SMD 1206              | 5        | 1M     |
| 39                       | R7, R8, R12        | Resistor SMD 1206              | 3        | 100K   |
| 40                       | R10                | Bourns 3386                    | 1        | 1M     |
| 41                       | R11                | Resistor SMD 0805              | 1        | 10R    |
| 42                       | R13                | Resistor SMD 2512              | 1        | 1K     |
| 43                       | R14, R15           | Resistor SMD 1206              | 2        | 1R3 1% |
| 44                       | R16                | Resistor SMD 0805              | 1        | 18R    |
| 45                       | R17                | Resistor SMD 1206              | 1        | 1K     |
| 46                       | R18                | Resistor SMD 0805              | 1        | 47R    |
| 47                       | R19                | Resistor Through-hole          | 1        | 75K    |
| 48                       | R20                | Resistor SMD 0805              | 1        | 1.2K   |
| 49                       | R21, R23           | Resistor SMD 0805              | 2        | 1K     |
| 50                       | R22                | Resistor SMD 0805              | 1        | 430R   |
| 51                       | R24                | Resistor SMD 0805              | 1        | DNP    |
| 52                       | R25                | Resistor SMD 0805              | 1        | 20K    |
| 53                       | U1                 | IRS2101                        | 1        |        |
| 54                       | U2, U3             | SFH617A                        | 2        |        |
| 55                       | U4                 | TL431ACLP                      | 1        |        |

View from Top side (Scale 1:1)

