INSTRUMENTS

| Item \# | Designator | Quantity | Value | PartNumber | Manufacturer | Description | PackageReference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | !PCB | 1 |  | TIDA-01416 | Any | Printed Circuit Board |  |
| 2 | C1 | 1 | 150uF | T520B157M006ATE070 | Kemet | CAP, TA, $150 \mu \mathrm{~F}, 6.3 \mathrm{~V},+/-20 \%, 0.07$ ohm, SMD | 3528-21 |
| 3 | $\begin{aligned} & \text { C2, C8, C14, } \\ & \text { C20, C26 } \end{aligned}$ | 5 | 10uF | GRM188R60J106ME84 | MuRata | CAP, CERM, $10 \mu \mathrm{~F}, 6.3 \mathrm{~V},+/-20 \%$, X5R, 0603 | 0603 |
| 4 | $\begin{aligned} & \text { C3, C9, C15, } \\ & \text { C21, C27 } \end{aligned}$ | 5 | 22pF | GRM1555C1H220FA01D | MuRata | CAP, CERM, $22 \mathrm{pF}, 50 \mathrm{~V},+/-1 \%, \mathrm{C} 0 \mathrm{G} / \mathrm{NP} 0,0402$ | 0402 |
| 5 | $\begin{aligned} & \text { C4, C10, C16, } \\ & \text { C22, C28 } \end{aligned}$ | 5 | 470pF | GCM155R71H471KA37D | MuRata | CAP, CERM, 470 pF, 50 V , +/- 10\%, X7R, AEC-Q200 Grade 1, 0402 | 0402 |
| 6 | $\begin{aligned} & \text { C5, C11, C17, } \\ & \text { C23, C29 } \\ & \hline \end{aligned}$ | 5 | 2.2uF | GCM188C71A225K | MuRata | CAP, CERM, $2.2 \mu \mathrm{~F}, 10 \mathrm{~V},+/-10 \%, \mathrm{X} 7 \mathrm{~S}, 0603$ | 0603 |
| 7 | C6, C7, C18, C19 | 4 | 22uF | GRM21BR61A226ME44L | MuRata | CAP, CERM, $22 \mu \mathrm{~F}, 10 \mathrm{~V},+/-20 \%$, X5R, 0805 | 0805 |
| 8 | C12, C13, C24, C25, C30, C31 | 6 | 22uF | GRM21BR60J226ME39L | MuRata | CAP, CERM, $22 \mu \mathrm{~F}, 6.3 \mathrm{~V},+/-20 \%$, X5R, 0805 | 0805 |
| 9 | H1, H2, H3, H4 | 4 |  | NY PMS 4400025 PH | B\&F Fastener Supply | Machine Screw, Round, \#4-40 x 1/4, Nylon, Philips panhead | Screw |
| 10 | H5, H6, H7, H8 | 4 |  | 1902C | Keystone | Standoff, Hex, 0.5"L \#4-40 Nylon | Standoff |
| 11 | $\begin{aligned} & \mathrm{J} 1, \mathrm{~J} 2, \mathrm{~J} 5, \mathrm{~J} 7, \mathrm{~J} 9, \\ & \mathrm{~J} 11 \end{aligned}$ | 6 |  | TSW-106-07-T-S | Samtec | Header, 100mil, 6x1, Tin, TH | 6x1 Header |
| 12 | $\begin{array}{\|l\|} \mathrm{J} 3, \mathrm{~J} 4, \mathrm{~J} 6, ~ J 8, \\ \mathrm{~J} 0, ~ J 12, ~ J 13, ~ J 14 ~ \end{array}$ | 8 |  | TSW-102-07-T-S | Samtec | Header, $2.54 \mathrm{~mm}, 2 \times 1$, Tin, TH | $\begin{aligned} & \text { Header, } 2.54 \mathrm{~mm}, \\ & 2 \times 1, \mathrm{TH} \end{aligned}$ |
| 13 | $\begin{aligned} & \text { JP1, JP2, JP3, } \\ & \text { JP4, JP5 } \\ & \hline \end{aligned}$ | 5 |  | TSW-103-07-T-S | Samtec | Header, $2.54 \mathrm{~mm}, 3 \times 1$, Tin, TH | $\begin{aligned} & \text { Header, } 2.54 \mathrm{~mm}, \\ & 3 \times 1 \text {, TH } \\ & \hline \end{aligned}$ |
| 14 | L1 | 1 | 470nH | XFL4015-471MEC | Coilcraft | Inductor, Shielded, Composite, $470 \mathrm{nH}, 3.5 \mathrm{~A}, 0.0076$ ohm, SMD | SMD, $4 \times 4 \times 1.5 \mathrm{~mm}$ |
| 15 | L2, L3, L4, L5 | 4 | 1 uH | XFL3012-102MEB | Coilcraft | Inductor, Shielded, Composite, $1 \mu \mathrm{H}, 2.5 \mathrm{~A}, 0.04$ ohm, SMD | $3 \times 1.2 \times 3 \mathrm{~mm}$ |
| 16 | R1 | 1 | 1.00Meg | RC0603FR-071ML | Yageo America | RES, $1.00 \mathrm{M}, 1 \%, 0.1 \mathrm{~W}, 0603$ | 0603 |
| 17 | R2 | 1 | 63.4k | RT0603BRD0763K4L | Yageo America | RES, $63.4 \mathrm{k}, 0.1 \%, 0.1 \mathrm{~W}, 0603$ | 0603 |
| 18 | R3 | 1 | 169k | RT0603BRD07169KL | Yageo America | RES, $169 \mathrm{k}, 0.1 \%$, 0.1 W , 0603 | 0603 |
| 19 | R4, R9, R12, R13 | 4 | 178k | RC0603FR-07178KL | Yageo America | RES, 178 k, 1\%, 0.1 W, 0603 | 0603 |
| 20 | R5 | 1 | 118k | RT0603BRD07118KL | Yageo America | RES, $118 \mathrm{k}, 0.1 \%$, $0.1 \mathrm{~W}, 0603$ | 0603 |
| 21 | R6 | 1 | 39.2k | RC0603FR-0739K2L | Yageo America | RES, $39.2 \mathrm{k}, 1 \%$, $0.1 \mathrm{~W}, 0603$ | 0603 |
| 22 | R7 | 1 | 113k | CRCW0603113KFKEA | Vishay-Dale | RES, $113 \mathrm{k}, 1 \%$, $0.1 \mathrm{~W}, 0603$ | 0603 |
| 23 | R8 | 1 | 165k | RT0603BRD07165KL | Yageo America | RES, $165 \mathrm{k}, 0.1 \%$, $0.1 \mathrm{~W}, 0603$ | 0603 |
| 24 | R10 | 1 | 243k | RT0603BRD07243KL | Yageo America | RES, $243 \mathrm{k}, 0.1 \%$, $0.1 \mathrm{~W}, 0603$ | 0603 |
| 25 | R11 | 1 | 38.3k | RT0603BRD0738K3L | Yageo America | RES, $38.3 \mathrm{k}, 0.1 \%$, $0.1 \mathrm{~W}, 0603$ | 0603 |
| 26 | R14 | 1 | 243k | RC0603FR-07243KL | Yageo America | RES, $243 \mathrm{k}, 1 \%$, $0.1 \mathrm{~W}, 0603$ | 0603 |
| 27 | R15 | 1 | 38.3k | RC0603FR-0738K3L | Yageo America | RES, $38.3 \mathrm{k}, 1 \%, 0.1 \mathrm{~W}, 0603$ | 0603 |
| 28 | R16, R17, R18 | 3 | 100k | CRCW0603100KJNEA | Vishay-Dale | RES, $100 \mathrm{k}, 5 \%$, $0.1 \mathrm{~W}, 0603$ | 0603 |
| 29 | U1 | 1 |  | TLV62085RLTR | Texas Instruments | 3-A High Efficiency Synchronous Step-Down Converter, RLT0007A (VSON-HR-7) | RLT0007A |
| 30 | U2, U4, U5 | 3 |  | TLV62080DSGR | Texas Instruments | 1.2A High Efficient Step Down Converter in $2 \times 2 \mathrm{~mm}$ SON Package, DSG0008A (WSON-8) | DSG0008A |
| 31 | U3 | 1 |  | TLV62084ADSGR | Texas Instruments | 2A High Efficient Step Down Converter in 2x2mm SON Package, DSG0008A (WSON-8) | DSG0008A |
| 32 | U6 | 1 |  | LM3880MF-1AA | Texas Instruments | Power Sequencer, 6-pin SOT-23 | MF06A |
| 33 | FID1, FID2, FID3 | 0 |  | N/A | N/A | Fiducial mark. There is nothing to buy or mount. | Fiducial |

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