

# Power Conversion NanoEVM BOM

| PR570E-2 BOM |                              |        |  |               |                      |             |
|--------------|------------------------------|--------|--|---------------|----------------------|-------------|
| COUNT        | RefDes                       | Value  | Description  | Size          | Part Number          | MFR         |
| 1            | C10A                         | 0.1uF  | Capacitor, Ceramic, 25V, X5R, 10%  | 0402          | C1005X5R1E104K       | TDK         |
| 1            | C1A                          | 22uF   | Capacitor, Ceramic, 6.3V, X5R, 20%   | 0805          | C2012X5R0J226MTJ     | TDK         |
| 3            | C1B, C2B, C3B                | 10uF   | Capacitor, Ceramic, 10V, X5R, 10%  | 0805          | C2012X5R1A106K       | TDK         |
| 2            | C1C, C2C                     | 10uF   | Capacitor, Ceramic, 6.3V, X5R, 10%   | 0603          | C1608X5R0J106KT      | TDK         |
| 1            | C1D                          | 4.7uF  | Capacitor, Ceramic, 10V, X5R, 10%  | 0603          | C1608X5R1A475K       | TDK         |
| 2            | C1E, C1F                     | 2.2uF  | Capacitor, Ceramic, 10V, X5R, 10%  | 0603          | C1608X5R1A225KT      | TDK         |
| 1            | C1G                          | 1.0uF  | Capacitor, Ceramic, 6.3V, X5R, 20%   | 0402          | C1005X5R0J105M       | TDK         |
| 6            | C1H, C1J, C2H, C2J, C3G, C4G | 10uF   | Capacitor, Ceramic, 6.3V, X5R, 20%   | 0603          | C1608X5R0J106M       | TDK         |
| 1            | C2A                          | 47uF   | Capacitor, Ceramic, 6.3V, X5R, 20%   | 1206          | C3216X5R0J476MT      | TDK         |
| 1            | C2D                          | 4.7uF  | Capacitor, Ceramic, 50V, X5R, 10%  | 1812          | C4532X5R1H475K       | TDK         |
| 1            | C2E                          | 0.22uF | Capacitor, Ceramic, 25V, X7R, 10%  | 0603          | C1608X7R1E224K       | TDK         |
| 2            | C2F, C2G                     | 0.01uF | Capacitor, 10V, X5R, +/-10%  | 0402          | C1005X5R1A104K       | TDK         |
| 1            | C3D                          | 1.0uF  | Capacitor, Ceramic, 25V, X5R, 10%  | 0603          | C1608X5R1E105K       | TDK         |
| 1            | C3F                          | 2.2uF  | Capacitor, Ceramic, 4V, X5R, 20%   | 0402          | AMK105BJ225MV-F      | AVX         |
| 1            | C4A                          | 1000pF | Capacitor, Ceramic, 25V, COG, 5%   | 0402          | C1005COG1E102K       | TDK         |
| 1            | L1A                          | 4.7uH  | Inductor, SMT, 1.1A, 120milliohm   | 0.177 x 0.185 | VLF5014AT-4R7M1R1    | TDK         |
| 2            | L1B, L2B                     | 2.2uH  | Inductor, SMT, 1.2A, 228 milliohm  | 0.118 x 0.118 | LPS3010-222ML        | Coilcraft   |
| 1            | L1C                          | 1.0uH  | Inductor, SMT, 1.7A, 140milliohms  | 0.118 x 0.118 | LPS3010-102NLC       | Coilcraft   |
| 1            | L1D                          | 10uH   | Inductor, SMT, 1.26A, 188milliohm  | 0.137 X 0.147 | VLCF4018AT-100MR74-2 | TDK         |
| 1            | L1E                          | 22uH   | Inductor, SMT, 580mA, 800milliohms   | 0.102 X 0.110 | VLF3012AT-220MR33    | TDK         |
| 1            | L1H                          | 2.2uH  | Inductor, SMT, 1.5A, 110milliohm   | 0.118 x 0.118 | LPS3015-222ML        | Coilcraft   |
| 1            | L1J                          | 2.2uH  | Inductor, SMT, 770mA, 230milliohms   | 0805          | CB2016T2R2M          | Taiyo Yuden |
| 1            | R1A                          | 22.1k  | Resistor, Chip, 1/16W, 1%  | 0402          | Std                  | Std         |
| 4            | R1B, R1C, R2C, R3C           | 10.0k  | Resistor, Chip, 1/16W, 1%  | 0402          | Std                  | Std         |
| 2            | R1D, R2D                     | 0      | Resistor, Chip, 1/16W, 1%  | 0402          | Std                  | Std         |
| 1            | R1E                          | 12.1   | Resistor, Chip, 1/16W, 1%  | 0603          | Std                  | Std         |
| 1            | R2A                          | 68.1k  | Resistor, Chip, 1/16W, 1%  | 0402          | Std                  | Std         |
| 1            | R3A                          | 100k   | Resistor, Chip, 1/16W, 1%  | 0402          | Std                  | Std         |
| 1            | R3D                          | 73.2k  | Resistor, Chip, 1/16W, 1%  | 0402          | Std                  | Std         |
| 1            | R4A                          | 3.65k  | Resistor, Chip, 1/16W, 1%  | 0402          | Std                  | Std         |
| 1            | R4D                          | Open   | Resistor, Chip, 1/16W, x%  | 0402          | Std                  | Std         |
| 1            | R5A                          | 6.81k  | Resistor, Chip, 1/16W, 1%  | 0402          | Std                  | Std         |
| 1            | R5D                          | 909k   | Resistor, Chip, 1/16W, 1%  | 0402          | Std                  | Std         |
| 1            | R6A                          | 7.5k   | Resistor, Chip, 1/16W, 1%  | 0402          | Std                  | Std         |
| 1            | R6D                          | 80.6k  | Resistor, Chip, 1/16W, 1%  | 0402          | Std                  | Std         |
| 1            | R7A                          | 1.2    | Resistor, Chip, 1/10W, 1%  | 0805          | Std                  | Std         |
| 1            | U1A                          |        | IC, Synchronous Boost Converter With Down Mode High Power White LED Driver             | SON-10        | TPS61059DRC          | TI          |
| 1            | U1B                          |        | IC, 2.25 MHz Dual Step Down Converter  | QFN10         | TPS62401DRC          | TI          |
| 1            | U1C                          |        | IC, 3MHz Synchronous Step Down Converter with I <sup>2</sup> C, 800mA                  | CSP-12        | TPS62350YZG          | TI          |
| 1            | U1D                          |        | IC, Dual Output Boost Regulator Using Single Inductor                                  | DRC-10        | TPS61140DRC          | TI          |
| 1            | U1E                          |        | IC, Constant Current LED Driver W/ Digital Brightness Control, V <sub>oyp</sub> 22.75V | WCSP-9        | TPS61061YZF          | TI          |
| 1            | U1F                          |        | IC, Ultra-low Noise, High PSRR 200 mA, LDO Regulators                                  | WCSP-05       | TPS79928YZU          | TI          |
| 1            | U1G                          |        | IC, Dual 250mA Output, RF LDO Regulator  | QFN-10        | TPS71247DRC          | TI          |
| 1            | U1H                          |        | IC, High Efficiency Single Inductor Buck-Boost Converter with 1.2A Switches            | QFN10         | TPS63001DRC          | TI          |
| 1            | U1J                          |        | IC, 3MHz Synchronous Step-Down Converter, 400mA  | CSP-8         | TPS62301YZD          | TI          |
| 1            | -                            |        | PCB, 3.7 In x 2.66 In x 0.031 In   |               | PR570                | Any         |

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