

# Petaluma (MAXREFDES30#) BOM

| Designation                         | Qty | Description                                                              |
|-------------------------------------|-----|--------------------------------------------------------------------------|
| 10V, 3.3V, 5V, -10V                 | 4   | Red multipurpose test point<br>Keystone 5010                             |
| AIN0 - AIN7                         | 8   | White (Test Point) Analog Input Connector<br>Keystone 5012               |
| TP0 - TP7                           | 8   | Brown multipurpose test point<br>Keystone 5125                           |
| GND -6POS                           | 6   | Black multipurpose test points<br>Keystone 5011                          |
| C1 - C8                             | 8   | 470pF 10%, 50V, C0G ceramic capcitor (0402)<br>Murata GRM1555C1H471J     |
| C9, C14                             | 2   | 1.0uF 10%, 10V, X5R ceramic capacitor (0402)<br>TDK C1005X5R1A105K       |
| C10, C12, C15, C26 - C32, C38 - C41 | 14  | 0.1uF 10%, 25V, X7R ceramic capacitor (0402)<br>TDK C1005X5R1E104K       |
| C11                                 | 1   | 47pF 5%, 50V, C0G ceramic capacitor (0402)<br>TDK C1005C0G1H470J         |
| C13, C44                            | 2   | 4.7uF 10%, 16V, X7R ceramic capacitor (0805)<br>Murata GRM219R71C475K    |
| C16, C17                            | 2   | 47uF 10%, 10V, X7R ceramic capacitor (1210)<br>Murata GRM32ER71A476K     |
| C18 - C25                           | 8   | 100pF 5%, 50V, C0G ceramic capacitor (0402)<br>Murata GRM1555C1H101JA01D |
| C33, C34, C43                       | 3   | 10uF 10%, 10V, X5R ceramic capacitor (0603)<br>TDK C1608X5R1A106K        |
| C35 - C37                           | 3   | 1.0uF 10%, 25V, X7R ceramic capacitor (0603)<br>Murata GRM188R71E105K    |
| C42                                 | 1   | 100uF 20%, 20V tantalum capacitor (2917)<br>AVX TPSE107M020R0150         |
| C45                                 | 1   | 68uF 20%, 20V tatnlum capacitor (2917)<br>AVX TPSE686M020R0150           |
| C46 - C47                           | 2   | 1uF 10%, 25V Tantalum capacitor (1206)<br>Kemet T494A105K025AT           |
| D1                                  | 1   | 30V 1A Schottky Diode (DO214AA)<br>Vishay VS-MBRS130LTRPBF               |
| J1                                  | 1   | FMC LPC Connector<br>SAMTEC ASP-134604-01                                |
| JU1 - JU4                           | 4   | 3-pin headers (strip, cut to fit)<br>Molex 22-28-4363                    |

|                          |   |                                                                                         |
|--------------------------|---|-----------------------------------------------------------------------------------------|
| L1                       | 1 | 47uH 2.6A Power Inductor<br>Bourns SRR1260-470M                                         |
| R1, R3, R5, R7, R9, R11  | 8 | 12k ohm 1% resistor (0402)<br>Any Any                                                   |
| R17 - R24                | 8 | 0 ohm 1% resistor (0402)                                                                |
| R25 - R32                | 8 | 10kohm 1% resistor (0402)                                                               |
| R33 - R40                | 8 | 1k ohm 1% resistor (0402)                                                               |
| R41                      | 1 |                                                                                         |
| R42                      | 1 | 1.58kohm 1% resistor (0402)                                                             |
| R45                      | 1 | 845 ohm 1% resistor (0402)                                                              |
| R46                      | 1 | 120 ohm 1% resistor (0402)<br>Panasonic ERJ-2RKF1200X                                   |
| R47 - R54                | 8 | 1.5k ohm 1% resistor (0402)                                                             |
| U1, U2                   | 2 | Quad 20V, Ultra-Precision, Low-Noise Op Amps (14 SO)<br>Maxim MAX44252ASD+              |
| U3                       | 1 | 8-Ch, Simultaneous Sampling, 16-Bit, +/-5V, 250ksps ADC (56 TQFN-EP)<br>MAX11046BETN+   |
| U4                       | 1 | Ultra-High-Precision, Ultra-Low-Noise, Voltage Reference (8 SO)<br>Maxim MAX6126AASA41+ |
| U5                       | 1 | 350mA, 16.5V input, low-dropout linear regulators (8 SO)<br>Maxim MAX1659ESA+           |
| U6                       | 1 | 5V LDO (6 SOT23)<br>Maxim MAX8881EUT50+                                                 |
| U7                       | 1 | Adjustable Voltage Invertor (8 SO)<br>Maxim MAX765ESA+                                  |
| U8                       | 1 | Negative LDO (D2PAK)<br>On Semi LM337BD2TG                                              |
| R2, R4, R6, R8, R10, R12 | 0 | Not Installed, resistor (0402)                                                          |
| PCB                      | 1 | PC board: Petaluma (MAXREFDES30#)<br>8-Ch, 16-Bit, Simultaneous Sampling, AFE           |
| SU1-SU3                  | 4 | Shunts                                                                                  |