

Santa Fe (MAXREFDES5#) BOM

Designation	Qty	Description
-12V_EXT, +12V_EXT	2	Red (Test Point) External Power Connector Keystone 5010
AIN0 - AIN3	4	White (Test Point) Analog Input Connector Keystone 5012
C3, C5, C8, C22, C41	5	47pF 5%, 50V, C0G ceramic capacitor (0402) TDK C1005C0G1H470J
C4, C6, C7, C14, C15, C18, C19, C21, C24 C26, C32, C39, C40, C42	14	0.1uF 10%, 25V, X7R ceramic capacitor (0402) TDK C1005X5R1E104K
C9, C11	2	1000pF 10% 50V X7R ceramic capacitor (0603) TDK C1608X7R1H102K
C13, C16, C20, C25 C37, C38	6	1uF 10%, 10V, X5R ceramic capacitor (0402) TDK C1005X5R1A105K
C23	1	4.7uF 10%, 10V, X5R ceramic capacitor (0603) TDK C1608X5R1A475K
C12, C17, C27	3	10uF 10%, 10V, X5R ceramic capacitor (0603) TDK C1608X5R1A106K
C33	1	22uF 20%, 16V, X5R ceramic capacitor (0805) TDK C2012X5R1C226M
C28	1	0.47uF 10%, 25V, X5R ceramic capacitor (0402) TDK C1005X5R1E474K
C29, C30, C34, C35	4	0.1uF 10%, 50V, X7R ceramic capacitor (0603) TDK C1608X7R1H104K
C31, C36, C47, C48	4	10uF 10%, 25V, X5R ceramic capacitor (0805) TDK C2012X5R1E106K
C43, C44, C45, C46	4	1uF 10%, 25V, X7R ceramic capacitor (0603) Murata GRM188R71E105K
D1, D2, D4, D5	4	30V 1A Schottky Diode (SOD-123), Top Mark = SX Diodes Inc. B130LAW-7-F

D3, D6	2	16.1V Zener Diode / I _z = 10mA (SOD-323) Top Mark = YY Diodes Inc. DDZ16CSF-7
FB1 - FB7	7	Surface Mount Ferrite Bead (0603) TDK MMZ1608B601C
GND0, GND1, GND2, GND3, GND4, GND5, GND6	7	Ground Connector Keystone 5011
J1	1	2 x 6 right angle male header PMOD compatible Samtec TSW-106-08-S-D-RA
JU1, JU2	2	2-pin HEADER, 2.54MM, COMES IN 36-40 PIN STRIPS (CUT TO FIT) SULLINS CONNECTOR SOLUTIONS PEC36SAAN
JU3, JU4, JU5	3	3-pin HEADER, 2.54MM, COMES IN 36-40 PIN STRIPS (CUT TO FIT) SULLINS CONNECTOR SOLUTIONS PEC36SAAN
R13	1	0 ohm 5% resistor (0402)
R5, R7	2	10 ohm 1% resistor (0402)
R3, R4	2	499 ohm 0.1% resistor (0805) 0.1W Stackpole Electronics Inc RNCS0805BKE499R
R10, R14	2	90.9k ohm 1% resistor (0402)
R11, R15	2	10k ohm 1% resistor (0402)
R17, R20	2	4.7k ohm 5% resistor (0402)
R23, R24	2	0 ohm 5% resistor (0805)
R25, R26	2	0 ohm 5% resistor (0603)
T1	1	198uH 3W 1:1:2.6:2.6 turn Transformer Halo Electronics TGM-H281NF
U1, U2	2	36V, Precision, Low-Noise Op-Amp (8 uMAX) Maxim MAX9632AUA+

U3	1	4-Channel, $\pm 3 \times$ VREF Multirange Inputs, Serial 16-Bit ADC (20 TSSOP) Maxim MAX1301AEUP+
U4	1	Ultra-High-Precision, Ultra-Low-Noise, Voltage Reference (8 SO) Maxim MAX6126AASA41+
U5	1	3W Primary-Side Transformer H-Bridge Driver (8 SO-EP) Maxim MAX256ASA+
U6, U7, U8	3	350mA, 16.5V Input, Low-Dropout Linear Regulators (8 SO) Maxim MAX1659ESA+
U9	1	Six-Channel Digital Isolator (16 SO) Maxim MAX14850ASE+
See Jumper Table	5	Shunts
PCB	1	PC board: Santa Fe (MAXREFDES5#) 16-bit High Accuracy Multi-Input Iso AFE

All components not listed above are not installed.