



Bill of Materials for the Python Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
J3 J4	2	HEADER ASSY 10 POS 2 ROW SMT	HDR_100_2X5_SMT	-	-	MOLEX	15916102	Yes	Yes
CR3	1	SCHOTTKY RECTIFIER 1A 30V	10BQ030PBF	-	-	VISHAY FORMERLY	10BQ030PBF	Yes	Yes
CR1 CR2	2	DIODE FAST SWITCHING 1A 100V	1N4148W	-	-	VISHAY SEMICONDUCTOR	1N4148W-V-GS08	Yes	Yes
C4	1	CAP 1nF 50V NPO	1nF	5%	0603	KEMET	C0603C102J5GAC	Yes	Yes
C17 C18 C19	3	CAP 10nF 50V X7R	10nF	10%	0603	KEMET	C0603C103K5RAC	Yes	Yes
C3 C42 C43 C44 C45 C5 C6	7	CAP 100nF 50V X7R	100nF	10%	0603	KEMET	C0603C104K5RAC	Yes	Yes
C12 C20 C21 C22 C23 C24 C25 C8	8	CAP 1uF 16V X5R	1uF	10%	0603	KEMET	C0603C105K4PAC	Yes	Yes
C30 C31 C32 C33 C34 C35 C36 C37 C38 C39 C40 C41	12	4.7uF 6.3V X5R 10%	4.7uF	10%	0603	KEMET	C0603C475K9PAC	Yes	Yes
C47	1	CAP 68pF 50WVDC 5%	68pF	5%	0603	KEMET	C0603C680J5GAC	Yes	Yes
C134	1	CAP 0.1uF 10% 50V X7R 0402	0.1uF	10%	0402	TDK	C1005X7R1H104K050BB	Yes	Yes
C7	1	CAP 100uF 6.3V X5R	100uF	20%	1206	KEMET	C1206C107M9PAC	Yes	Yes
R28	1	RESISTOR 100 OHM 63mW 1%	100 Ohm	1%	0402	VISHAY DALE	CRCW0402100RFKED	Yes	Yes
R10 R12 R16 R8	4	RESISTOR 0	0 Ohm	-	0603	DALE	CRCW06030000Z0EA	Yes	Yes
R5	1	RESISTOR 100 OHM	100 Ohm	1%	0603	VISHAY DALE	CRCW0603100RFKEA	Yes	Yes
R19	1	RESISTOR 1.5K 1/8W 1%	1.5 K	1%	0603	DALE	CRCW06031501FT	Yes	Yes
R4	1	RESISTOR 220 OHM	220 Ohm	1%	0603	VISHAY DALE	CRCW0603220RFKEA	Yes	Yes
R2	1	RESISTOR 68K	24 K	1%	0603	VISHAY DALE	CRCW060324K0FKEA	Yes	Yes
R18	1	RESISTOR 2.21K 1/16W 1%	2.21 K	1%	0603	DALE	CRCW06032K21FKTA	Yes	Yes
R6	1	RESISTOR 47K	47 K	1%	0603	VISHAY DALE	CRCW060347K0FKEA	Yes	Yes
R1	1	RESISTOR 68K	68 K	1%	0603	VISHAY DALE	CRCW060368K0FKEA	Yes	Yes
U1	1	1.5 A 260 kHz and 520 kHz Low Voltage Buck Regulators	CS51414	-	-	ON Semiconductor	CS51414	No	Yes
R87 R88 R89 R91	4	RESISTOR 10K ohm 1/16W 1%	10 K	1%	0402	Panasonic	ERJ-2RKF1002X	Yes	Yes
NFM1 NFM2 NFM3 NFM4 NFM5 NFM6	6	FIDUCIAL BOARD LOCAL 40	FIDUCIAL_BD_40	-	-	-	FIDUCIAL BOARD 40	Yes	Yes
L1	1	INDUCTOR 10uH 2.2A 20% SMD	10uH	20%	-	VISHAY DALE	IHLP2020BZER100M11	Yes	Yes
X1	1	Clock Oscillator	KC3225A-C3	-	-	KYOCERA	KC3225A-C3	Yes	Yes
U54	1	16-Bit 2-/4-Channel ?S ADC	LTC2487	-	-	Linear Technology	LTC2487IDE#PBF	Yes	Yes
J1	1	HEADER 6x2 PINS SMT	IDR_MMT_106_02_F_D	-	-	SAMTEC	MMT-106-02-F-DH	Yes	Yes
U3	1	Low Dropout Regulator Ultra High Accuracy Low Iq 500 mA	NCP3335ADM180R2G	-	-	ON Semiconductor	NCP3335ADM180R2G	No	Yes
U4	1	Low Dropout Regulator Ultra High Accuracy Low Iq 500 mA	NCP3335ADM330R2G	-	-	ON Semiconductor	NCP3335ADM330R2G	No	Yes
U5	1	Low Dropout Regulator Adjustable Ultra High Accuracy Low Iq 500 mA	NCP3335ADMADJR2G	-	-	ON Semiconductor	NCP3335ADMADJR2G	No	Yes
U6A	1	Cap to keep Python 5000 in socket	SOCKETCAP	-	-	ON Semiconductor	NO LOAD	No	Yes
C16	1	CAP NOLOAD	CNOLOAD_0603	-	0603	-	NO LOAD CAPACITOR	Yes	Yes
JMP1	1	4 position jumper for a S1S2 selection	SEL2_0402	-	0402	-	NO LOAD RESISTOR	Yes	Yes
R11 R13 R14 R15 R17 R3 R9 R90 R92	7	NO LOAD RESISTOR	RNOLOAD_0603	-	0603	-	NO LOAD RESISTOR	Yes	Yes
U7	1	PYTHON 1.3 Megapixel 210 FPS Global Shutter CMOS Image Sensor	NOIP1SN1300A	-	-	ANDON SOCKET	680-48-SM-G10-R14-1	Yes	Yes
U6	1	PYTHON 5 MegaPixels Global Shutter CMOS Image Sensor	NOIP1SN5000A	-	-	ANDON SOCKET	686-84-SM-G10-L14-1	Yes	Yes
J2	1	FMC Module Connector	AM-40-01-S-10-2-RA-K	-	-	Samtec	SEAM-40-01-S-10-2-RA-K-TR	Yes	Yes
C10 C11 C13 C14 C15 C46 C9	7	CAP 10uF 16V	C10UF_1206	-	1206	AVX	TCJA106M016R0200	Yes	Yes
C1 C2	2	CAP 10uF 20WVDC 10%	C10UF_1210_20V10	-	1210	AVX	TPSB106K020R0500	Yes	Yes
C26 C27 C28 C29	4	CAP 100uF 20WVDC 20%	C100UF_1210_10V20	-	1210	AVX	TPSB107M010R0400	Yes	Yes