

ADS8910EVM-PDK

Designator	Quantity	Value	Description	PackageReference	PartNumber	Manufacturer	Alternate PartNumber	Alternate Manufacturer
IPC8	1		Printed Circuit Board for Evaluation of ADS9110		PA006	Any		
!PCB2	1		USB Controller Board for ADC EVMs (Kit Item)	N/A	PHI-EVM-CONTROLLER (Edge# 6591636 rev. B)	Texas Instruments		
C1, C3	2	47uF	CAP, CERM, 47 uF, 25 V, +/- 20%, X5R, 1206	1206	C3216X5R1E476M160A C	TDK		
C2, C5, C6, C8, C32, C36, C38, C40, C43	9	1uF	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0603	0603	GRM188R71E105KA12 D	MuRata		
C4, C21, C23, C26, C41, C44, C48	7	10uF	CAP, CERM, 10 uF, 10 V, +/- 10%, X7R, 0805	0805	GRM21BR71A106KE51 L	MuRata		
C7	1	0.1uF	CAP, CERM, 0.1 uF, 25 V, +/- 5%, X7R, 0603	0603	C0603C104J3RACTU	Kemet		
C13, C39, C45, C50, C51	5	10uF	CAP, CERM, 10 uF, 10 V, +/- 10%, X7T, 0603	0603	ZRB18AD71A106KE01L	MuRata		
C16, C31, C42	3	1000pF	CAP, CERM, 1000 pF, 50 V, +/- 1%, COG/NP0, 0603	0603	GRM1885C1H102FA01J	MuRata		
C20	1	22uF	CAP, CERM, 22 uF, 10 V, +/- 20%, X7S, 0805	0805	C2012X7S1A226M125A C	TDK		
C34, C35, C37	3	0.01uF	CAP, CERM, 0.01 uF, 100 V, +/- 1%, COG/NP0, 0805	0805	C0805C103F1GACTU	Kemet		
C47, C49	2	0.1uF	CAP, CERM, 0.1 uF, 16 V, +/- 10%, X7R, 0402	0402	GRM155R71C104KA88 D	MuRata		
D1	1	Green	LED, Green, SMD	LED_0805	APT2012LZGCK	Kingbright		
D2	1	40V	Diode, Schottky, 40 V, 0.5 A, SOD-323	SOD-323	CUS05S40.H3F	Toshiba		
H1, H2, H3, H4	4		MACHINE SCREW PAN PHILLIPS 4-40	Machine Screw, 4-40, 1/4"	PMSSS 440 0025 PH	B&F Fastener Supply		
H5, H6, H7, H8	4		3/16 Hex Female Standoff	3/16 Hex Female Standoff	1891	Keystone		
H9, H10	2		ROUND STANDOFF M3 STEEL 5MM	ROUND STANDOFF M3 STEEL 5MM	9774050360R	Würth Elektronik		
H14, H15	2		Machine Screw Pan PHILLIPS M3		RM3X4MM 2701	APM HEXSEAL		
J1, J2	2		Header, 2.54 mm, 2x1, Gold, R/A, SMT	Header, 2.54 mm, 2x1, R/A, SMT	87898-0204	Molex		
J3, J7	2		Connector, End launch SMA, 50 ohm, SMT	End Launch SMA	142-0701-801	Johnson		
J4, J6, J8	3		Header, 100mil, 3x1, Gold, SMT	Header, 100mil, 3x1, Gold, SMT	TSM-103-01-L-SV	Samtec		
J5	1		Header(Shrouded), 19.7mil, 30x2, Gold, SMT	Header (Shrouded), 19.7mil, 30x2, SMT	QTH-030-01-L-D-A	Samtec		
LBL1	1		Thermal Transfer Printable Labels, 0.650" W x 0.200" H 10,000 per roll	PCB Label 0.650"H x 0.200"W	THT-14-423-10	Brady		
R1	1	280k	RES, 280 k, 0.1%, 0.125 W, 0805	0805	RG2012P-2803-B-T5	Susumu Co Ltd		
R2	1	0.1	RES, 0.1, 1%, 0.1 W, 0603	0603	ERJ-3RSFR10V	Panasonic		
R5	1	10.0k	RES, 10.0 k, 0.1%, 0.1 W, 0603	0603	RG1608P-103-B-T5	Susumu Co Ltd		
R6, R23, R28, R65	4	10.0k	RES, 10.0 k, 1%, 0.1 W, 0402	0402	ERJ-2RKF1002X	Panasonic		
R7, R11, R12, R32, R34, R35, R37, R40, R42, R43, R46, R47, R49, R51, R52, R63, R64	17	0	RES, 0, 5%, 0.063 W, 0402	0402	ERJ-2GE0R00X	Panasonic		
R8, R58	2	0.22	RES, 0.22, 1%, 0.1 W, 0603	0603	ERJ-3RQFR22V	Panasonic		
R10, R15, R20	3	20.0k	RES, 20.0 k, 0.1%, 0.1 W, 0603	0603	RG1608P-203-B-T5	Susumu Co Ltd		
R19, R24, R57, R59, R60	5	0	RES, 0, 5%, 0.1 W, 0603	0603	ERJ-3GEY0R00V	Panasonic		
R21	1	499	RES, 499, 0.1%, 0.1 W, 0603	0603	RG1608P-4990-B-T5	Susumu Co Ltd		
R33	1	1.00	RES, 1.00, 1%, 0.1 W, 0603	0603	RC0603FR-071RL	Yageo America		
R38, R44	2	100	RES, 100, 0.1%, 0.1 W, 0603	0603	RG1608P-101-B-T5	Susumu Co Ltd		
R41, R45, R54, R55	4	1.00k	RES, 1.00 k, 0.1%, 0.1 W, 0603	0603	RG1608P-102-B-T5	Susumu Co Ltd		
R48, R50	2	2.21	RES, 2.21, 1%, 0.1 W, 0603	0603	CRCW0603R21FKEA	Vishay-Dale		
SH-J1, SH-J2, SH-J3	3		Shunt, 100mil, Gold plated, Black	Shunt 2 pos. 100 mil	881545-2	TE Connectivity		
TP1, TP2, TP3, TP4, TP5	5	SMT	Test Point, Compact, SMT	Testpoint_Keystone_C ompact	5016	Keystone		
TP6, TP7	2	SMT	Test Point, Miniature, SMT	Testpoint_Keystone_ Miniature	5015	Keystone		
U1	1		Low Noise, Very Low Drift, Precision Voltage Reference, -40 to 125 degC, 8-pin VSSOP (DGK), Green (RoHS & no Sb/Br)	DGK0008A	REF5050AIDGKT	Texas Instruments	Equivalent	Texas Instruments
U2	1		36-V, 1-A, 4.17-uVRMS, RF LDO Voltage Regulator, RGW0020A	RGW0020A	TPS7A4700RGW	Texas Instruments		Texas Instruments
U3	1		Low-Noise, Low Quiescent Current, Precision Operational Amplifier e-trim Series, DBV0005A	DBV0005A	OPA376AIDBVR	Texas Instruments	OPA376AIDBVT	Texas Instruments
U8	1		I2C BUS EEPROM (2-Wire), TSSOP-B8	TSSOP-8	BR24G32FVT-3AGE2	Rohm		
U9, U10	2		High-Bandwidth, High-Precision, Low THD+N, 16-Bit and 18-Bit Analog-to-Digital Converter (ADC) Drivers, DBV0006A	DBV0006A	OPA625IDBVR	Texas Instruments	OPA625IDBVT	Texas Instruments
U11	1		18-Bit, 1-MSPS SAR ADC with Integrated Reference Buffer, LDO, and Enhanced Serial Interface, RGE0024H	RGE0024H	ADS8910BIRGER	Texas Instruments		Texas Instruments
C9, C10, C17	0	0.1uF	CAP, CERM, 0.1 uF, 25 V, +/- 5%, X7R, 0603	0603	C0603C104J3RACTU	Kemet		
C11	0	4.7uF	CAP, CERM, 4.7 uF, 16 V, +/- 10%, X5R, 0805	0805	EMK212BJ475KG-T	Taiyo Yuden		
C12	0	1uF	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0603	0603	GRM188R71E105KA12 D	MuRata		
C14, C15, C24, C27, C28, C29, C52, C53	0	10uF	CAP, CERM, 10 uF, 10 V, +/- 10%, X7T, 0603	0603	ZRB18AD71A106KE01L	MuRata		
C18	0	10pF	CAP, CERM, 10 pF, 50 V, +/- 1%, COG/NP0, 0603	0603	C0603C100F5GAC7867	Kemet		
C19, C54	0	0.22uF	CAP, CERM, 0.22 uF, 25 V, +/- 5%, X7R, 0603	0603	C0603C224J3RAC7867	Kemet		
C22	0	1uF	CAP, CERM, 1uF, 10V, +/-10%, X7R, 0603	0603	GRM188R71A105KA61 D	MuRata		

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C25	0	10uF	CAP, CERM, 10uF, 10V, +/-10%, X7R, 0805	0805	GRM21BR71A106KE51L	MuRata		
C30	0	0.1uF	CAP, CERM, 0.1 uF, 16 V, +/- 10%, X7R, 0402	0402	GRM155R71C104KA88D	MuRata		
C33	0	47uF	CAP, CERM, 47 uF, 10 V, +/- 10%, X7R, 1210	1210	GRM32ER71A476KE15L	MuRata		
C55, C57	0	22uF	CAP, CERM, 22 uF, 10 V, +/- 20%, X7S, 0805	0805	C2012X7S1A226M125AC	TDK		
C56	0	0.47uF	CAP, CERM, 0.47 uF, 35 V, +/- 10%, X5R, 0805	0805	GMK212BJ474KG-T	Taiyo Yuden		
FID1, FID2, FID3, FID4, FID5, FID6	0		Fiducial mark. There is nothing to buy or mount.	N/A	N/A	N/A		
H12	0		CABLE USB A MALE-B MICRO MALE 1M (Kit Item)	USB Cable	102-1092-BL-Q0100	CNC Tech	-	-
R3, R4, R9, R13, R14, R18, R53, R61, R62	0	0	RES, 0, 5%, 0.063 W, 0402	0402	ERJ-2GE0R00X	Panasonic		
R16, R29	0	1.00k	RES, 1.00 k, 0.1%, 0.1 W, 0603	0603	RG1608P-102-B-T5	Susumu Co Ltd		
R17	0	4.99k	RES, 4.99 k, 0.1%, 0.1 W, 0603	0603	RG1608P-4991-B-T5	Susumu Co Ltd		
R22	0	2.49k	RES, 2.49 k, 0.1%, 0.1 W, 0603	0603	RG1608P-2491-B-T5	Susumu Co Ltd		
R25, R26	0	0.22	RES, 0.22 ohm, 1%, 0.1W, 0603	0603	ERJ-3RQFR22V	Panasonic		
R27	0	30.0k	RES, 30.0 k, 0.1%, 0.1 W, 0603	0603	RG1608P-303-B-T5	Susumu Co Ltd		
R30	0	499	RES, 499, 0.1%, 0.1 W, 0603	0603	RG1608P-4990-B-T5	Susumu Co Ltd		
R31	0	4.75	RES, 4.75, 1%, 0.1 W, 0603	0603	CRCW06034R75FKEA	Vishay-Dale		
R36, R39	0	0.22	RES, 0.22, 1%, 0.1 W, 0603	0603	ERJ-3RQFR22V	Panasonic		
R56	0	4.7	RES, 4.7, 5%, 0.125 W, 0805	0805	ERJ-6GEYJ4R7V	Panasonic		
U4	0		Low Noise Negative Bias Generator, 8-pin Mini SOIC, Pb-Free	MUA08A	LM7705MM/NOPB	Texas Instruments		
U5	0		Low-Noise, 900 kHz, RRIO, Precision Operational Amplifier, Zero-Drift Series, 2.2 to 5.5 V, -40 to 125 degC, 5-pin SOT23 (DBV0005A), Green (RoHS & no Sb/Br)	DBV0005A	OPA378AIDBVT	Texas Instruments	Equivalent	Texas Instruments
U6	0		High-Bandwidth, High-Precision, Low THD+N, 16-Bit and 18-Bit Analog-to-Digital Converter (ADC) Drivers, DBV0006A	DBV0006A	OPA625IDBVR	Texas Instruments	OPA625IDBVT	Texas Instruments
U7	0		High-Precision Voltage Reference with Integrated High-Bandwidth Buffer, DGK0008A	DGK0008A	REF6025AIDGK	Texas Instruments		Texas Instruments

Notes:

Unless otherwise noted in the Alternate PartNumber and/or Alternate Manufacturer columns, all parts may be substituted with equivalents.

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