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TPS65982EVM

TIDA-00714

Designator	Quantity	Value	Description	PackageReference	PartNumber	Manufacturer	Alternate PartNumber	Alternate Manufacturer
IPCB1	1		Printed Circuit Board		HVL117	Any		
C1, C4	2	10uF	CAP, CERM, 10 µF, 25 V, +/- 20%, X5R, 0603	0603	GRM188R61E106MA73	MuRata		
C2, C12	2	0.1uF	CAP, CERM, 0.1 µF, 10 V, +/- 10%, X5R, 0201	0201	CL03A104KP3NUNC	Samsung		
C3	1	0.22uF	CAP, CERM, 0.22 µF, 6.3 V, +/- 20%, X5R, 0201	0201	GRM033R60J224ME90	MuRata		
C5	1	0.1uF	CAP, CERM, 0.1 µF, 50 V, +/- 20%, C0G/NP0, 0402	0402	C1005X7R1H104M	TDK		
C6	1	1uF	CAP, CERM, 1 µF, 35 V, +/- 10%, JB, 0402	0402	C1005JB1V105K050BC	TDK		
C7, C8, C9, C10	4	0.01uF	CAP, CERM, 0.01 µF, 50 V, +/- 10%, X7R, 0402	0402	GRM155R71H103KA88D	MuRata		
C11	1	22uF	CAP, CERM, 22 µF, 10 V, +/- 20%, X5R, 0603	0603	GRM188R61A226ME15D	MuRata		
C13, C16, C17, C18	4	1uF	CAP, CERM, 1 µF, 10 V, +/- 20%, X5R, 0201	0201	CL03A105MP3NSNC	Samsung		
C14	1	10uF	CAP, CERM, 10 µF, 10 V, +/- 20%, X5R, 0402	0402	CL05A106MP5NUNC	Samsung		
C15, C19	2	220pF	CAP, CERM, 220 pF, 25 V, +/- 10%, X7R, 0201	0201	GRM033R71E221KA01D	MuRata		
C20, C23, C26, C31, C34, C37, C42, C45, C48	9	0.1uF	CAP, CERM, 0.1uF, 50V, +/-20%, C0G/NP0, 0402	0402	C1005X7R1H104M	TDK		
C22, C33, C44	3	10uF	CAP, CERM, 10 µF, 25 V, +/- 10%, X5R, 0805	0805	C2012X5R1E106K125AB	TDK		
C24, C25, C35, C36, C46, C47	6	22uF	CAP, CERM, 22 µF, 35 V, +/- 20%, X5R, 0805	0805	C2012X5R1V226M125AC	TDK		
C28	1	330pF	CAP, CERM, 330 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402	C1005C0G1H331J	TDK		
C29	1	5600pF	CAP, CERM, 5600 pF, 50 V, +/- 10%, X7R, 0402	0402	GRM155R71H562KA88D	MuRata		
C39	1	100pF	CAP, CERM, 100 pF, 50 V, +/- 10%, X7R, 0402	0402	CC0402KRX7R9BB101	Yageo America		
C40	1	2200pF	CAP, CERM, 2200 pF, 50 V, +/- 10%, X5R, 0402	0402	GRM155R61H222KA01D	MuRata		
C50	1	91pF	CAP, CERM, 91 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402	GRM1555C1H910JA01D	MuRata		
C51	1	1800pF	CAP, CERM, 1800 pF, 50 V, +/- 10%, X7R, 0402	0402	GRM155R71H182KA01D	MuRata		
C53	1	0.01uF	CAP, CERM, 0.01 µF, 10 V, +/- 10%, X5R, 0201	0201	GRM033R61A103KA01D	MuRata		
D1	1	40V	Diode, Schottky, 40 V, 3 A, SMA	SMA	B340A-13-F	Diodes Inc.		
D2, D3, D4, D5, D6, D7, D8, D9	8	White	LED, White, SMD	0402, White	LW QH8G-Q2S2-3K5L-1	OSRAM		
J1	1		Connector, Receptacle, USB Type C, R/A, SMT	Connector, Receptacle, USB Type C, SMT	20-0000016-01	Lintes Technology		
J2, J3	2		Receptacle, 100mil, 10x2, Gold, TH	10x2 Receptacle	PPPC102LFBN-RC	Sullins Connector Solutions		
J4	1		Connector, DC Power Jack, R/A, 3 Pos, TH	Power connector	JPD1135-509-7F	Foxconn		
J6	1		Header, 100mil, 2x1, Tin, TH	Header 2x1	90120-0122	Molex		
L1	1	21 ohm	Ferrite Bead, 21 ohm @ 100MHz, 6A, 0805	0805	FBMJ2125HM210NT	Taiyo Yuden		
L2, L3, L4	3	10uH		7.2 mm x 6.65 mm	ASPI-0630LR-100M-T15	ABRACON	-	-
Q1, Q2	2	30V	MOSFET, N-CH, 30 V, 60 A, SON 3.3x3.3mm	SON 3.3x3.3mm	CSD17309Q3	Texas Instruments		None

Designator	Quantity	Value	Description	PackageReference	PartNumber	Manufacturer	Alternate PartNumber	Alternate Manufacturer
Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10	8	50 V	Transistor, NPN, 50 V, 0.05 A, SOT-323	SOT-323	DTC114EUAT106	Rohm		
R1	1	0.01	RES, 0.01 ohm, 1%, 0.25W, 0805	0805	WSL0805R0100FEA18	Vishay-Dale		
R3, R5, R10, R11, R38, R39, R40, R41, R46, R56, R60, R62, R65, R66, R69, R71	16	0	RES, 0, 5%, 0.05 W, 0201	0201	ERJ-1GE0R00C	Panasonic		
R4, R7, R8, R9	4	3.3k	RES, 3.3 k, 5%, 0.063 W, 0402	0402	CRCW04023K30JNED	Vishay-Dale		
R12, R13, R14, R15, R27, R42, R43, R44, R45	9	1.00k	RES, 1.00 k, 1%, 0.05 W, 0201	0201	CRCW02011K00FKED	Vishay-Dale		
R20, R75, R76, R79, R80	5	3.83k	RES, 3.83 k, 1%, 0.05 W, 0201	0201	CRCW02013K83FKED	Vishay-Dale		
R21, R24, R25, R26, R29, R33, R49, R52, R55, R70	10	100k	RES, 100 k, 1%, 0.05 W, 0201	0201	CRCW0201100KFKED	Vishay-Dale		
R28	1	15.0k	RES, 15.0 k, 1%, 0.063 W, 0402	0402	CRCW040215K0FKED	Vishay-Dale		
R72, R73, R74, R86, R87, R89, R90, R96	8	560	RES, 560, 5%, 0.063 W, 0402	0402	CRCW0402560RJNED	Vishay-Dale		
R77, R78	2	9.09k	RES, 9.09 k, 1%, 0.05 W, 0201	0201	CRCW02019K09FKED	Vishay-Dale		
R82, R92, R102	3	100k	RES, 100 k, 1%, 0.063 W, 0402	0402	CRCW0402100KFKED	Vishay-Dale		
R84	1	32.4k	RES, 32.4 k, 1%, 0.063 W, 0402	0402	CRCW040232K4FKED	Vishay-Dale		
R85	1	2.74k	RES, 2.74 k, 1%, 0.063 W, 0402	0402	CRCW04022K74FKED	Vishay-Dale		
R88, R97, R109	3	47.5k	RES, 47.5 k, 1%, 0.063 W, 0402	0402	CRCW040247K5FKED	Vishay-Dale		
R94	1	19.1k	RES, 19.1 k, 1%, 0.063 W, 0402	0402	CRCW040219K1FKED	Vishay-Dale		
R95	1	8.45k	RES, 8.45 k, 1%, 0.063 W, 0402	0402	CRCW04028K45FKED	Vishay-Dale		
R104	1	7.15k	RES, 7.15 k, 1%, 0.063 W, 0402	0402	CRCW04027K15FKED	Vishay-Dale		
R108	1	9.53k	RES, 9.53 k, 1%, 0.063 W, 0402	0402	CRCW04029K53FKED	Vishay-Dale		
S1	1		DIP Switch, SPST 4Pos, Slide, SMT	6.2x2.0x6.2mm	TDA04H0SB1	C&K Components		
S3	1		SWITCH TACTILE SPST-NO 0.05A 12V	3x1.6x2.5mm	B3U-1000P	Omron Electronic Components		
TP1, TP2, TP3, TP4, TP5	5		Test Point, Miniature, SMT	Test Point, Miniature, SMT	5019	Keystone		
U1	1		3V, 8Mbit, Serial Flash Memory with Dual and Qual SPI, SOIC-8	SOIC-8	W25Q80DVSNIG	Winbond		
U2	1		TPS65982 Preview Specification, ZQZ0096A	ZQZ0096A	TPS65982AAZQZR	Texas Instruments		Texas Instruments
U3, U4	2		1, 4, 6 CHANNEL PROTECTION SOLUTION FOR SUPER-SPEED (UP TO 6 GBPS) INTERFACE, DQA0010A	DQA0010A	TPD4E05U06DQA	Texas Instruments		None
U5, U6, U7	3		4.5V to 28V Input, 3A Output, Synchronous SWIFT Step-Down DC-DC Converter, DRC0010J	DRC0010J	TPS54335DRCR	Texas Instruments	TPS54335DRCT	Texas Instruments
C27, C30, C38, C41, C49, C52	0	120pF	CAP, CERM, 120 pF, 50 V, +/- 5%, COG/NP0, 0402	0402	GRM1555C1H121JA01D	MuRata		

Designator	Quantity	Value	Description	PackageReference	PartNumber	Manufacturer	Alternate PartNumber	Alternate Manufacturer
FID1, FID2, FID3, FID4, FID5, FID6	0		Fiducial mark. There is nothing to buy or mount.	Fiducial	N/A	N/A		
H1, H2, H3, H4	0		Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw	NY PMS 440 0025 PH	B&F Fastener Supply		
H5, H6, H7, H8	0		Standoff, Hex, 0.5"L #4-40 Nylon	Standoff	1902C	Keystone		
J5	0		Receptacle, 100mil, 3x1, Gold, TH	Receptacle, 3x1, 2.54mm, TH	PPPC031LFBN-RC	Sullins Connector Solutions		
J7	0		Header, 100mil, 2x2, Tin, SMT	2x2 100mil Tin Header	15-91-2040	Molex		
R2, R6, R16, R17, R18, R19, R22, R23, R30, R31, R32, R34, R35, R36, R37, R47, R48, R50, R51, R53, R54, R57, R58, R59, R61, R63, R64, R67, R68	0	0	RES, 0, 5%, 0.05 W, 0201	0201	ERJ-1GE0R00C	Panasonic		
R81, R91, R101	0	220k	RES, 220 k, 5%, 0.063 W, 0402	0402	CRCW0402220KJNED	Vishay-Dale		
R83, R93, R103	0	43.2k	RES, 43.2 k, 1%, 0.063 W, 0402	0402	CRCW040243K2FKED	Vishay-Dale		
S2	0		DIP Switch, SPST 4Pos, Slide, SMT	6.2x2.0x6.2mm	TDA04H0SB1	C&K Components		

Notes:

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

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