

TPS23861EVM-612 (TIDA-00290 Motherboard)

Designator	Quantity	Value	Description	PackageReference	PartNumber	Manufacturer	Alternate PartNumber	Alternate Manufacturer
IPCBA?	1		Update Description to match PCBA's description	N/A	PWR612A	Any		
C1, C8, C11, C12	4	0.01uF	CAP, CERM, 0.01uF, 100V, +/-10%, X7R, 0603	0603	06031C103KAT2A	AVX		
C2, C5	2	1uF	CAP, CERM, 1uF, 10V, +/-10%, X7R, 0805	0805	0805ZC105KAT2A	AVX		
C3, C7	2	0.1uF	CAP, CERM, 0.1uF, 100V, +/-10%, X7R, 0805	0805	C2012X7R2A104K	TDK		
C4	1	1uF	CAP, CERM, 1uF, 100V, +/-10%, X7R, 1206	1206	GRM31CR72A105KA01L	MuRata		
C6	1	22uF	CAP, CERM, 22uF, 10V, +/-10%, X7R, 1206	1206	GRM31CR71A226KE15L	MuRata		
C9, C10, C13, C14	4	0.1uF	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	0603	06035C104KAT2A	AVX		
C15, C16	2	47uF	CAP, AL, 47uF, 100V, +/-20%, 0.32 ohm, SMD	SMT Radial H13	EEV-FK2A470Q	Panasonic		
C17, C18	2	2200pF	CAP, CERM, 2200pF, 2000V, +/-10%, X7R, 1812	1812	C4532X7R3D222K	TDK		
D1	1	Green	LED, Green, SMD	Power TOPLED w/lens	LT E63C-CADB-35-L-Z	OSRAM		
D2	1	58V	Diode, TVS, Uni, 58V, 600W, SMB	SMC	SMCJ58A-13-F	Diodes Inc.		
D3	1	100V	Diode, Ultrafast, 100V, 1A, SMA	SMA	MURA110T3G	ON Semiconductor		
D4, D5, D6, D7, D8, D9, D10, D11	8	22V	Diode, Zener, 22V, 550mW, SMB	SMB	1SMB5933BT3G	ON Semiconductor		
D12, D13, D14, D16, D17, D18	6	Blue	LED, Blue, SMD	BLUE 0603 LED	LB Q39G-L2N2-35-1	OSRAM		
H1, H2, H3, H4, H5, H6, H7, H8, H9	9		Bumpon, Cylindrical, 0.312 X 0.200, Black	Black Bumpon	SJ61A1	3M		
J1	1		TERMINAL BLOCK 5.08MM VERT 2POS	TERM_BLK, 2pos, 5.08mm	ED120/2DS	On-Shore Technology, Inc.		
J2	1		Header (shrouded), 100mil, 5x2, High-Temperature, Gold, TH	5x2 Shrouded header	N2510-6002-RB	3M		
J3, J4, J6, J17, J18	5		Connector, Receptacle, 100mil, 10x1, Gold plated, TH	HEADER, RECEPTACLE, 100mil, 10x1	SSW-110-01-G-S	Samtec, Inc.		
J5	1		Receptacle 100mil 3x1, Gold, TH	Receptacle, 100mil, 3x1	SSW-103-01-G-S	Samtec, Inc.		
J7, J8, J9, J19, J20, J21	6		RJ-45 with integrated magnetics	RJ-45 Jack	JK0-0177NL	Pulse Engineering	7499511611 or 7499511611A	Würth Elektronik
J10, J11, J12, J22, J23, J24	6		RJ-45, Vertical, TH	RJ-45 Jack, 8Pos Right Angle	SS-7188V-A-NF	Stewart Connector		
J13, J14, J15, J16, J25, J26, J27, J28	8		Header, TH, 100mil, 2x1, Gold plated, 230 mil above insulator	TSW-102-07-G-S	TSW-102-07-G-S	Samtec, Inc.		
J29	1	15A	Terminal screw, vertical, snap-in	7693	7693	Keystone		
L1	1	82uH	Inductor, Drum Core, Ferrite, 82uH, 0.78A, 0.37 ohm, SMD	SDR0805	SDR0805-820KL	Bourns	744787820	Würth Elektronik
R1	1	200k	RES, 200k ohm, 1%, 0.1W, 0603	0603	CRCW0603200KFKEA	Vishay-Dale		
R2	1	1.00	RES, 1.00 ohm, 1%, 0.25W, 1206	1206	CRCW12061R00FKEA	Vishay-Dale		
R3	1	1.00k	RES, 1.00k ohm, 1%, 0.1W, 0603	0603	CRCW06031K00FKEA	Vishay-Dale		
R4	1	100k	RES, 100k ohm, 1%, 0.1W, 0603	0603	CRCW0603100KFKEA	Vishay-Dale		
R5	1	47k	RES, 47k ohm, 5%, 0.1W, 0603	0603	CRCW060347K0JNEA	Vishay-Dale		
R6	1	3.16k	RES, 3.16k ohm, 1%, 0.1W, 0603	0603	CRCW06033K16FKEA	Vishay-Dale		
R7, R8, R9, R11, R12	5	10.0k	RES, 10.0k ohm, 1%, 0.1W, 0603	0603	CRCW060310K0FKEA	Vishay-Dale		
R10, R13	2	4.7k	RES, 4.7k ohm, 5%, 0.1W, 0603	0603	CRCW06034K70JNEA	Vishay-Dale		
R14, R15, R16, R17, R20, R21, R22, R23	8	7.50k	RES, 7.50k ohm, 1%, 0.25W, 1206	1206	CRCW12067K50FKEA	Vishay-Dale		
SH-J1, SH-J2, SH-J3, SH-J4, SH-J5, SH-J6, SH-J7, SH-J8	8	1x2	Shunt, 100mil, Flash Gold, Black	Closed Top 100mil Shunt	SPC02SYAN	Sullins Connector Solutions		
TP1, TP2	2	Red	Test Point, Multipurpose, Red, TH	Keystone5010	5010	Keystone		
TP3, TP11, TP14, TP15, TP16	5	SMT	Test Point, Compact, SMT	Testpoint_Keystone_Compact	5016	Keystone		
TP4, TP5, TP6, TP7, TP8	5	White	Test Point, Multipurpose, White, TH	Keystone5012	5012	Keystone		
TP9	1	Black	Test Point, Multipurpose, Black, TH	Keystone5011	5011	Keystone		
U1	1		High Voltage (80V) Step Down Switching Regulator, 8-pin MSOP, Pb-Free	MUA08A	LM5007MM/NOPB	National Semiconductor		
U2, U4	2		25 Mbps Quad Channels, 3 / 1, Digital Isolator, 3.3 V / 5 V, -40 to +125 degC, 16-pin SOIC (DW), Green (RoHS & no Sb/Br)	DW0016A	ISO7241CDW	Texas Instruments	Equivalent	None
U3	1		SINGLE BUFFER/DRIVER WITH OPEN-DRAIN OUTPUT, DCK0005A	DCK0005A	SN74LVC1G07DCK	Texas Instruments		None
PWR613	1		TPS23861EVM-613 Daughter Board	PWR613	PWR613	Texas Instruments		
H10, H11, H12, H14	0		Standoff, Hex, 1"L #6-32 Nylon, M-F	1" Nylon Hex Standoff	4821	Keystone		

Notes:

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

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