Bill of Materials for the AP0101AT2L00XPGAH3-GEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
C1 C2 C3 C4 C5 C6 C7 C8 C9 C10 C11 C12 C13 C15 C16 C17 C20 C21 C22 C24 C25 C26 C27 C28 C29 C30 C31 C32 C33 C34 C35 C36 C37 C38 C39 C40 C41 C42 C43 C44 C45 C46 C47 C48 C49 C50 C51 C52 C53 C54 C55 C56 C57 C58 C59 C60 C61 C62 C63 C64 C65 C66 C67 C68 C69 C70 C71 C72 C73 C74 C75 C76 C77 C78 C79 C80 C81 C82 C83 C84 C85 C86 C87 C101 C102 C103 C104 C105 C106 C107 C108 C109 C110 C111 C112 C113 C114 C115 C116 C117 C118 C119 C120 C121 C122 C123 C124 C125 C126 C127 C130 C131 C132 C133 C136 C137 C138 C139 C140 C141 C142	63	CAP, CERAMIC, 100nF, 10V, X6R, 20%, 0201	100nF	20%	201	Panasonic	ECJZEB1A104M	Yes	Yes
C9 C10 C14 C17 C18 C19 C23 C31 C35 C37 C40 C43 C57 C60 C66 C69 C70 C72 C74 C100 C107 C109 C122 C123 C128 C129 C134 C135 C143 C144	30	CAP, TANTALUM CHIP, STD, 10uF, 10V, 10%, 3216	10uF	10%	3216-18	AVX	TAJA106K010R	Yes	Yes
C27 C28	2	CAP, CERAMIC, 2nF, X7R, 10%	2nF	10%	402	Kemet	C0402C202K8RACTU	Yes	Yes
C29 C31 C87	11	CAP, CERAMIC, 100nF, 16V, X7R	100nF	10%	402	Murata	GRM155R71C104KA88D	Yes	Yes
C30 C88 C91	3	CAP, CERAMIC, 100nF, 16V, X6R, 10%	100nF	10%	402	Panasonic	ECJ2EB1C104K	Yes	Yes
C89 C90 C92 C93 C94 C95	6	CAP, TANTALUM CHIP, LOW ESR, 10uF, 10V, 10%, 3216	10uF	10%	3216-18	AVX	TPSA106K010R0600	Yes	Yes
C98	1	CAP, CERAMIC, 22pF, 50V, C0G	22pF	10%	402	AVX	04025A220JAT2A	Yes	Yes
C42 C48 C99	3	CAP, CERAMIC, 10nF, 10V, X6R, 10%	10nF	10%	201	Panasonic	ECJZEB1A103K	Yes	Yes
C55	1	CAP, TANTALUM CHIP, LOW ESR, 22uF, 10V, 10%, 6032	22uF	10%	6032-28	Kemet	B45197A2226K009	Yes	Yes
C52 C54 C97	3	CAP, CERAMIC, 1uF, 10V, X7R, 10%	1uF	10%	805	Panasonic	ECJ2YB1A105K	Yes	Yes
C53	1	CAP, CERAMIC, 220nF, 16V, X7R	220nF	10%	805	Panasonic	ECJ2VB1C224K	Yes	Yes
C64 C68	2	CAP, CERAMIC, 18pF, 50V, C0G	18pF	5%	402	Panasonic	ECJ0EC1H180J	Yes	Yes
C96 C81	2	CAP, CERAMIC, 100nF, 16V, X7R, 10%	100nF	10%	603	AVX	0603YC104KAT2A	Yes	Yes
D1 D2	2	DIODE, LED, CHIP, GRN, CLEAR	GRN		603	Lite-On	LTST-C190KGKT	Yes	Yes
J1	1	CONN, SOCKET, HIGH-SPEED, 2x20, 50 MIL PBS, 0.635MM PITCH, ALGAMMF PINS, 5 GND BUS PIN, LEAF GOLD PLT'G, RETENTION	CONN2-2x20-1-(QFS)			Samtec	QFS-020-01.25-L-D-A-RT1	Yes	Yes
L1	1	IND, CHIP COIL, SMD, 10uH, 225mA, 10%	10uH	10%	806	Murata	LQH5BCN100M03L	Yes	Yes
L2	1	IND, EMI FILTER, CHIP, FERRITE	1uF		603	Murata	NFM18PC105R1J3D	Yes	Yes
P1 P2 P5 P7 P8 P11 P13 P15 P16 P17 P19 P20 P21 P22 P23 P24	17	CONN, HEADER, VERTICAL, 1x2, 3 PIN, 2MM PITCH, THRU-HOLE	HDR2-1x2-P			3M	951102-0622-AR	Yes	Yes
P6	1	CONN, HEADER, HIGH-SPEED, 2x20, 50 MIL PBS, 0.635MM PITCH, 05.79 LEAD ST'N.E, ALGAMMF PINS, 1 GND BUS PIN, GOLD PLT'G, RETENTION	HDR02-2x20-05.79-F-(QMS)			Samtec	QMS-020-05.79-H-D-A-RT1	Yes	Yes
P9	1	CONN, HEADER, VERTICAL, 2x4, 8 PIN, 2.54MM PITCH, 5.84MM MATE HEIGHT, GOLD	HDR8-2x4-P			Tyco Electronics	87227-4	Yes	Yes
P10 P12 P14 P18 P25 P26 P27 P28	10	CONN, HEADER, VERTICAL, 1x2, 2 PIN, 2MM PITCH, THRU-HOLE	HDR2-1x2-P			3M	951102-0622-AR	Yes	Yes
P35	1	CONN, JACK, POWER, SMLS, HIGH CURRENT, 2 PIN, 20VDC @ 6A, 2.5MM ID, 5.5MM OD, 9.5MM L	JACK-3-PWR-24V-P			Cui Inc.	PJ-102AH	Yes	Yes
P24	1	CONN, HEADER, R/LSE, 3 PIN, 1.00MM PITCH, 90° R, 1.65MM MATED HEIGHT, GOLD, 4.1A, SMT	HDR1-1x3-P			Molex	70171-0004	Yes	Yes
P33 P34	2	CONN, HEADER, VERTICAL, 2x2, 8 PIN, 2MM PITCH, THRU-HOLE	HDR8-2x2-P			3M	951206-0622-AR	Yes	Yes
P36	1	CONN, HEADER, VERTICAL, 2x10, 20 PIN, .100 PITCH, 05 MIL SQ POSTS	HDR20-2x10-P (TSW)			Samtec	TSW-110-07-G-D	Yes	Yes
P36 P39	2	CONN, HEADER, VERTICAL, 2x5, 10 PIN, .100 PITCH, 05 MIL SQ POSTS	HDR10-2x5-P (TSW)			Samtec	TSW-105-07-G-D	Yes	Yes
R1	1	RESISTOR, PRECISION THICK FILM CHIP, SMD, 392 OHM, 0.1W, 1%, 0402	392	1%	402	Panasonic	ERJ2RKF3920X	Yes	Yes
R2 R3 R4 R8 R9 R11 R13 R26 R33 R34 R35 R36 R37 R39 R40 R41 R43 R44 R45 R46 R51 R52 R53 R62 R63 R67 R69 R72 R73	30	RESISTOR, THICK FILM CHIP, SMD, 10K, 0.063W, 5%, 0402	10K	5%	402	Panasonic	ERJ2GEJ103X	Yes	Yes
R7 R27 R28 R29 R32 R38 R40 R41 R42 R43 R48 R50 R54 R55 R56 R57 R58 R59 R60 R61 R64 R65 R66 R68 R70 R71 R74	17	RESISTOR, THICK FILM CHIP, SMD, 0 OHM JUMPER, 0.063W, 5%, 0402	0	5%	402	Panasonic	ERJ2GE0R00X	Yes	Yes
R10 R12	2	RESISTOR, THICK FILM CHIP, SMD, 1.0K OHM, 0.063W, 5%, 0402	1.0K	5%	402	Panasonic	ERJ2GEJ102X	Yes	Yes
R14 R15 R16 R21 R23	5	RESISTOR, POTENTIOMETER, SMD, ADJ, 50K, 0.5W, 10%, SMD, 2MTL SQ TOP ADJ	50K	10%	2mx1x92x290	Bourns	3361S-1-503GLF	Yes	Yes
R31 R17 R24	4	RESISTOR, THICK FILM CHIP, SMD, 15K, 0.063W, 5%, 0402	15K	5%	402	Panasonic	ERJ2GEJ153X	Yes	Yes
R30	1	RESISTOR, THICK FILM CHIP, SMD, 10K OHM, 0.063W, 5%, 0402	10K	5%	402	Panasonic	ERJ2GEJ103X	Yes	Yes
R22	1	RESISTOR, THICK FILM CHIP, SMD, 10K, 0.1W, 5%, 0603	10K	5%	402	Panasonic	ERJ2GEJ103X	Yes	Yes
R25 R42	2	RESISTOR, THICK FILM CHIP, SMD, 33 OHM, 0.063W, 5%, 0402	33	5%	402	Panasonic	ERJ2GEJ330X	Yes	Yes
R31	1	RESISTOR, THICK FILM CHIP, SMD, 1M, 0.063W, 5%, 0402	1M	5%	402	Panasonic	ERJ2GEJ105X	Yes	Yes
R98	1	RESISTOR, THICK FILM CHIP, SMD, 0 OHM JUMPER, 0.1W, 5%, 0603	0	5%	603	Panasonic	ERJ3GEY0R00V	Yes	Yes
R94 R95 R96 R75 R76 R77 R82 R83 R84	10	RESISTOR, PRECISION THICK FILM CHIP, SMD, 10K, 0.1W, 1%, 0603	10K	1%	603	Panasonic	ERJ3EKF1002V	Yes	Yes
R73	1	RESISTOR, PRECISION THICK FILM CHIP, SMD, 4.7K, 0.1W, 1%, 0603	4.7K	1%	402	Panasonic	ERJ2RKF4701X	Yes	Yes
SW1	1	SWITCH, TACTILE, SPST-NO, 0.05A, 24V, 6.0MM J-FRM, SPRT RET, 4.45N OVERTRAVEL	PB-SPST			C&K Components	PTS636SL20SMTR LFS	Yes	Yes
TP8 TP9	2	CONN, TERMINAL, TEST POINT, COMPACT, 0.1in, Red, SMT	TSTPT-0016			Keystone Electronics	5016	Yes	Yes
TP15 TP16 TP17 TP18 TP19 TP20 TP21 TP22 TP23	9	CONN, TERMINAL, TEST POINT, MINATURE, RED, THRU-HOLE, PCB, PROBE LOCATION	TSTPT-5000-RED			Keystone Electronics	5000	Yes	Yes
U5	1	IC, BANDK CCPROCESSOR, APO101, 0.5MM, 64 BALL, 4.5X4.5X0.5MM, BGA	APO101 Automotive		VBGA64	Aptina Imaging	APO101AT2L02DPGA0	Yes	Yes
U2	1	IC, SERIAL EEPROM, 5Pl, 2MBit, 1.8V-5.5V, 0.5X0.5X0.3MM, WCSP	M95M01-R		SCB	STMicroelectronics	M95M01-RMNBP	Yes	Yes
U3 U10 U21	3	IC, AND GATE, SINGLE, 2 INPUT	SN74LVC1G08		SOT23-5	Texas Instruments	SN74LVC1G08DBVR	Yes	Yes
U6	1	IC, TRANSLATOR, VOLTAGE-LEVEL, 2-BIT BIDIRECTIONAL, 100Mbps, 1.2V TO 3.6V (A PORT), 1.65V TO 5.5V (B PORT), 8-PIN, US8	TXB0102DCUR		VSSOP8	Texas Instruments	TXB0102DCUR	Yes	Yes
U9	1	IC, I/O EXPANDER, I2C, 4-BIT, 1.65V TO 5.5V, 2.5X2MM, WCSP	PCA9306		TSSOP8	NXP Semiconductors	PCA9306DP,118	Yes	Yes
U8	1	IC, SERIAL FLASH MEMORY, 4 I/O, 512KBit, 50MHz SPI BUS INTERFACE, 5 PIN SOT-23, 3.0V, SPI	M25P05-A		SO8	Numonyx	M25P05-AVMNBP	Yes	Yes
U7 U13 U11 U12	4	IC, VOLTAGE REGULATOR, LDO, LINEAR, ADJ, 500mA, 2mV TYP, VOLTAGE 0.8 TO 5V, TSOT23-5 PACKAGE	ADP171ANJZ		TSOT23-5	Analog Devices	ADP171ANJZ-R7	Yes	Yes
U5 U8	2	IC, VOLTAGE REGULATOR, LDO, LINEAR, FIXED, 3.3V, 300mA, INPUT VOLTAGE 1.8 TO 5.5V, TSOT23-5 PACKAGE	ADP171ANJZ-3.3		TSOT23-5	Analog Devices	ADP171ANJZ-3.3-R7	Yes	Yes
U12	1	IC, VOLTAGE REGULATOR, LDO, LINEAR, ADJ, 250mA, HIGH-PSRR, 5-PIN SOT-23	TPS78301		SOT23-5	Texas Instruments	TPS78301DBVR	Yes	Yes
U14	1	POSITIVE LDO, 150MW/300, SHDN, 5-SOT, 300MVA, SOT23	LT1763-3.3V		SO8	Linear Technology	LT1763CS8-3.3#PBF	Yes	Yes
U15 U17 U13	3	IC, BUFFER, SINGLE SCHMITT-TRIGGER, 32mA, 1.65V TO 5.5V, 1.5X0.5MM, WCSP	SN74LVC1G17-Q1		SOT23-5	Texas Instruments	SN74LVC1G17QDBVRQ1	Yes	Yes
U16	1	IC, 9/10/12 TRANSCEIVER, TYPE, 1.8V TO 3.3V, 2.5X2.5X0.6MM, WCSP	LTC2801		DFN12	Linear Technology	LTC2801CSW#PBF	Yes	Yes
U18	1	IC, SUPERVISOR, MICROPROCESSOR POWER SUPPLY, 2.63V, ACTIVE-LOW RESET OUTPUT, SOT23-5	CAT811		SOT143-4	ON Semiconductor	CAT811STB	No	Yes
U20	1	IC, SERIAL EEPROM, I2C, 64KBit, 1.8V TO 5.5V, 3.0X3.0X0.8MM, TDFN	24FC64-I/SN		SO8	Microchip	24FC64-I/SN	Yes	Yes
U22 U24 U25	3	IC, LEVEL TRANSLATOR, DUAL, 3-BIT, 10MBit, 3.6V TO 5.5V, 3.0X3.0X0.8MM, TDFN	FXMAH102UMX		MicroPak-8	Fairchild Semiconductor	FXMAH102UMX	Yes	Yes
U26	1	IC, TRANSLATOR, VOLTAGE-LEVEL, 4-BIT BIDIRECTIONAL, 1.2V TO 3.6V (A PORT), 1.65V TO 5.5V (B PORT), 14-PIN TSSOP	TXB0104-Q1		TSSOP14	Texas Instruments	TXB0104QPWRQ1	Yes	Yes
U27	1	IC, SERIAL FLASH MEMORY, 4-I/O, 64MBit, 75MHz SPI BUS INTERFACE, 8 PIN SO N, 5.6X4.9MM, SPI/QI	M25P64		SO16	Numonyx	M25P64-VMF6PB	Yes	Yes
U28	1	IC, FPGA, CYCLONE IV DEVICE, EP4CE6F17, 6K, 1.15V TO 1.25V, 256-PIN FBGA	EP4CE6F17		FBGA256	Altera	EP4CE6F17C8N	Yes	Yes
Y1	1	OSC, CRYSTAL CLOCK, SMD, CMOS, 2.25V TO 3.63V, 27.000MHz, 5.0MM X 7.0MM	27MHz			Kyocera	KC2520Z27.0000C20E00	Yes	Yes
Y2	1	CRYSTAL, ULTRA MINIATURE, CERAMIC, 24MHz, 18pF, SMD, 2.5MM X 2.0MM	24MHz			Abracon Corp.	ABM8-27.000MHZ-B2-T	Yes	Yes