



Bill of Materials for the CAT3649AGEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
U1	1	6 Channel LED Driver	-	-	TQFN16	ON Semiconductor	CAT3649HV3-GT2	No	Yes
U2	1	Ambient Light Sensor	-	-	3 x 3 mm	ON Semiconductor	NOA1211	No	Yes
U3	1	8 bit Microcontroller	-	-	CUDFN	Silicon Laboratories	C8051F321	Yes	Yes
U4	1	Low Dropout Regulator	(5 V to 3.3 V)	-	1.6 x 1.6	ON Semiconductor	CAT6218-330TDG	No	Yes
U5	1	5 V Voltage Regulator	-	-	MLP-28	ON Semiconductor	MCT78M05ABDT	No	Yes
D1 to D6	6	White LED	-	-	SOT-223	Lite-On	LTW-150TK	Yes	Yes
D7	1	Red LED	-	-	DPAK-3	Everlight	EL17-215SURC	Yes	Yes
C1 to C4, C6, C8, C11, C13	8	Ceramic Capacitor	1 μ F / 10V, X7R	10%	1206	Kemet	C0805C105K9RACTU	Yes	Yes
C7, C9, C10, C16, C14	5	Ceramic Capacitor	100 nF	10%	0805	AVX	0805ZC104KAT2A	Yes	Yes
C5	1	Ceramic Capacitor	47 nF	10%	0805	AVX	08053C473KAT2A	Yes	Yes
C15	1	Tantalum Capacitor	10 μ F/10V	10%	0805	Vishay	TM8R106K010UBA	Yes	Yes
R1	1	SMD Resistor	1/8 W, 100 K Ω	1%	0805	Vishay	RL0805K100-1	Yes	Yes
R2, R8	3	SMD Resistor	1/8 W, 4.7 k Ω	1%	1210	Vishay	RL0805K004.7-1	Yes	Yes
R3	1	SMD Resistor	1/8 W, 180 Ω	1%	0805	Vishay	RL0805K180-1	Yes	Yes
R4, R5	2	SMD Resistor	1/8 W, 22 k Ω	1%	0805	Vishay	RL0805K022-1	Yes	Yes
R6	1	SMD Resistor	1/8 W, 100 k Ω	1%	0805	Vishay	RL0805K100-1	Yes	Yes
R7	1	SMD Resistor	1/8 W, 200 Ω	1%	0805	Vishay	RL0805E200-1	Yes	Yes
R9	1	SMD Resistor	1/8 W, 1.2 k Ω	1%	0805	Vishay	RL0805K001.2-1	Yes	Yes
R10	1	SMD Resistor	1/8 W, 0.5 Ω	1%	0805	Yageo	RL0805FR-070R5L	Yes	Yes
J1 to J6, J8 to J11	10	3-pin Header Connector, 0.1", Single Strip	-	-	1.54mm x 4.62mm	MMM	2303-6211TG	Yes	Yes
J7	1	2-pin Header Connector, 0.1", Single Strip	-	-	1.54mm x 3.08mm	MMM	2302-6211TG	Yes	Yes
ISP	1	5-pin Header Connector, 0.1", Single Strip	-	-	1.54mm x 7.70mm	MMM	2305-6211TG	Yes	Yes
T1 – T8	8	Pin Receptacle (Test Points)	-	-	1.54mm x 1.54mm	Mil-Max	Various	Yes	Yes
K1	1	Slide Switch, SPDT	-	-	11.60mm x 4.00mm	E-Switch	EG1218	Yes	Yes
SW1, SW2	2	Pushbutton	-	-	3.50mm x 6.00mm	Schukat	DTS31N	Yes	Yes
BTH	1	Battery Holder 9 V	-	-	53.90mm x 29.60mm	Keystone	1294K-ND	Yes	Yes