

**M52235EVB**  
**Material List**

REF. DES.	QTY	PKG	DESCRIPTION	MFG	PART NUMBER
+3.3V, LED1, LED2, LED3, LED4, DUP, LNK, SPD, ACT, RX, TX	11	1206	LED, GREEN SMT	Fairchild	QTLP651C4
ABORT, RESET, COL	3	1206	LED, RED	Fairchild	QTLP651C2
ABORT_SW, RESET_SW, SW1, SW2, SW3	5	SMT	Switch, push, 6mm sq., sealed	Apem	MJPTSMW or MJPTSMWB
BDM_EN, CAN_TERM, LED_EN, VDD-EN, PHY_LED_EN, VX_EN	6	THRU	HEADER, PINS, 1X2		
BDM_PORT	1	thru	Header, pins, 2x13		
BDM_SEL, CLK_SEL, COM_SEL2, PWR_SEL	4	thru	Header, pins, 1x3	MEI	
BR1, BR2	2	SMT	Rectifier, bridge, 1A, 200V	Tiawan Semi	DBS103G
C1, 2	2	0603	Cap., 15pF NOP/COG, 5%	Murata	GRM1855C1H150JA01D
C3, 15, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 52, 65, 67	29	0805	Cap., .1uF, X7R, 50V, 10%	Murata	GRM21BR71H104KA01L
C4, 11, 12, 16, 17, 18, 43, 45	8	0603	Cap., .22uF, 16V, X7R, 10%	Murata	GRM188R71C224KA01D
C5	1	0603	Cap., 1000pF, 50V, X7R, 10%	Murata	GRM188R71H102KA01D
C6, 7, 9, 10, 14	5	0603	Cap., .1uF, X7R, 16V, 10%	Murata	GRM188R71C104KA01D
C8	1	SMB	Cap., 10uF 10v tant	AVX	TAJB106K010
C13, 66	2	SMD	Cap., 100uF 35V Elect. 6.3mmD	Nichicon	UWT1V101MCL1GLS
C44, 46, 64	3	0805	Cap., .01uF, X7R, 50V, 10%	Murata	GRM216R71H103KA01D
C47	1	0805	Cap., .1uF, X7R, 100V	Meritek	
C48	1	0805	Cap., 1000pF, 50V, X7R, 10%	Murata	GRM216R71H102KA01D
C49	1	0805	Cap., .047uF, X7R, 50V	Murata	GRM21BR71H473KA01L
C50, 51	1	0805	Cap., 120pF, COG, 50V	Murata	GRM2165C1H121JA1D

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C53	1	SMD	Cap., 22uF 25V Elect. 6.3mm Dia	Nichicon	UWX1E220MCR1
C54	1	THRU	Cap., 47uF 80-100V Elect., 10mm Dia, 5mm LS	Nichicon	UVR2A470MPD
C55	1	1210	Cap., 1.0uF, X7R, 100V	Murata	GRM32ER72A105KA01L
C56	1	1812	Cap., 4700pF, X7R, 2KV	Murata	GR443DR73D472KW01L
C57	1	0805	Cap., 270pF NOP/COG, 5%	Murata	GRM2165C1H271JD51D
C58, 59, 63	3	SMD	Cap., 220uF 10V Elect. 6.3mm Dia, LESR	Nichicon	UUD1A221MCL1GLS
C60	1	0805	Cap., 10uF, Y5P, 10V	Murata	GRM21BR61A106KE19L
C61	0	0805	Cap., TBD, <b>DO NOT INSTALL</b>		
C62	1	0805	Cap., 4700pF, X7R, 50V	Murata	GRM216R71H472KA01D
C68	1	SMB	Cap., 10uF 16V Elect. 4mm Dia	Nichicon	UWX1C100MCR1GB
CAN_EN, I2C_PULL_EN, RZ1_EN-RV1_EN, VRH-VRL	4	thru	Header, pins, 2x2	MEI	
COM_SEL1	1	thru	Header, pins, 2x3	MEI	
CT1, 2, 3, 4	0	0805	Option, <b>DO NOT INSTALL</b>		
D1, 2	2	SOT23	Diode, 30V SK	Fairchild	BAT54
D3	1	SMT	Diode, 1A 20v SK DO214AC	Bourns	CD214A-B120
D4	1	smt	diode, schottkey, 3A 20V, DO214AB	Vishay	SS32
D5	1	smt	diode, rectifier, 1A 50V, DO214AC	Tiawan semi	S1A
D6	1	smt	Diode, Transcient prot., 60V, 400W, DO214AC	Fairchild	SMBJ60A
EX_CLK	0	Thru	Connector, SMA verticle, <b>DO NOT INSTALL</b>	Johnson	142-0701-231
FB1, 2, 3, 4	4	0805	Ferrite Bead, 330 ohm, 1A	Murata	BLM21PG331SN1D
FEET	5		Rubber feet, small dia.	3M	SJ-67A1
GND_TP	2	THRU	HEADER, PINS, 1X1		
J1	1	thru	RJ45, w/ shield, Poe compatible	Kycon	GSX-NS-88-3.05-30
L1	1	1210	Inductor, 10uH choke	Panasonic	ELJ-PA100KF
L2	1	1812	Inductor, 10uH 1A	Murata	LQH43CN100K03L
MCU_PORT	0	thru	Header, socket, 2x40, <b>DO NOT INSTALL</b>		
ON_OFF	1	thru	Switch, toggle, horizontal, SPDT, 5A DC	Eswitch	100SP1T2B4M6QE
POE_ON	1	0603	LED, Blue, 5V	Fairchild	QTLP601CEBTR

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PWR	1	thru	Power Jack, 2mm Barrel	CUI	PHJ-002A
Q2	1	SOIC	MOSFET, N channel	IOR / Fairchild	IRF7492PBF / FDS2572
R1	1	0603	Res., 1M 5%	Rohm	MCR03EZPJ1.0M
R2	1	0805	Res., 68 OHM 5%	Rohm	MCR10EZHJ68
R3	1	0805	Res., 220 OHM 5%	Rohm	MCR10EZHJ220
R4, 9, 10, 11, 12, 13, 14, 74	8	0805	Res., 4.7K	Rohm	MCR10EZHJ4.7K
R5, 46	2	0805	Res., 47K 5%	Rohm	MCR10EZHJ47K
R6, 64, 66, 67	4	0805	Res., 0 ohm	Rohm	MCR10EZHJ0.0
R7, 15, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 73, 79	15	0805	Res., 270 Ohm 5%	Rohm	MCR10EZHJ270
R8	1	0805	Res., 12.4K Ohm, 1%	Rohm	MCR10EZHJ12.4K
R16, 36, 40, 41	4	0805	Res., 1K 5%	Rohm	MCR10EZHJ1.0K
R17, 43	2	0805	Res., 20K 5%	Rohm	MCR10EZHJ20K
R18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 37, 39, 42, 44, 47	22	0805	Res., 10K 5%	Rohm	MCR10EZHJ10K
R35	1	0805	Res., 62 ohm, 5%	Rohm	MCR10EZHJ62
R38	1	0805	Res., 75 ohm, 5%	Rohm	MCR10EZHJ75
R45	1	0805	Res., 1M 5%	Rohm	MCR10EZHJ1.0M
R59, 60, 61, 62	4	0805	Res., 49.9 Ohm, 1%	Rohm	MCR10EZHJ49.9
R63	1	0805	Res., 24.9K Ohm, 1%	Rohm	MCR10EZHJ24.9K
R65	1	0805	Res., 470 ohm, 5%	Rohm	MCR10EZHJ470
R68	1	0805	Res., 10 ohm, 5%	Rohm	MCR10EZHJ10
R69	1	0805	Res., 11K ohm, 5%	Rohm	MCR10EZHJ11K
R70	1	2512	Res., 2 Ohm 5% 1W	Panasonic	ERJ-1TYJ2.0U
R71	1	0805	Res., 180 Ohm 5%	Rohm	MCR10EZHJ180
R72	1	0805	Res., 24 ohm, 5%	Rohm	MCR10EZHJ24
R76	1	0805	Res., 14.7K Ohm, 1%	Rohm	MCR10EZHJ14.7K
R78	1	0805	Res., 130 Ohm 5%	Rohm	MCR10EZHJ130
R75, 77	0	0805	Res., <b>DO NOT INSTALL</b>		
R80	1	0805	Res., 22 Ohm 5%	Rohm	MCR10EZHJ22
RCAN1, RCAN2	0	0805	Res., <b>DO NOT INSTALL</b>		
RV1	1	thru	Pot, 5K 1 turn, thumb	Bourns	3352W-502LF

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RZ1	1	0805	Phototransistor, 660nm	Rohm	RPM-075PTT86
Shunt	34		Shunt jumper, .1		
T1	1	SOIC	10/100tx transformer	Pulse	H2019NL
T2	1	smt	POE transformer	Coilcraft	POE70P-33L
TB1	1	thru	Term Block, 3.5mm, 2p, horz.	OST	
U1A	1	LQFP	MCU, MCF5223 112 LQFP	Freescale	MCF5223
U1B	0	TQFP	MCU, MCF5223 80 TQFP-EP	Freescale	MCF5223
U2	1	SOIC	IC, INVERT, Schmitt	TI	SN74LVC14ADR
U3, 4, 5	3	SOIC	IC, XCVR, RS232, 3.3V	Intercil	ICL3232IBNZ
U6	1	SOIC	IC, XCVR, CAN, 3.3V	TI	SN65HVD230D
U7	1	SOIC	IC, Quad Tri_state Buffer	TI	SN74LVC125ADR
U8	1	SOIC	IC, Oct. Transparent Latch	TI	SN74LVC573ADR
U9	1	SOT235	IC, volt reference, 2.5V	TI	TL431CDBVR
U10	1		IC, POE Power supply	Freescale	MC34670
U11	1	smt	IC, optocoupler	Fairchild	H11A817S or SD
U12	1	SOT235	IC, OPQMP, single	TI	LMV321DBVR
UART0, UART1, UART2	3	thru	Connector, DB9F, R/A. .318, W/NUT	Norcomp	182-009-212-181
UART0_EN, UART1_EN, UART2_EN	3	thru	Header, pins, 2x4		
VR1	1	T263	IC, Vreg. 500ma, Linear, robust, 3.3V	National semi	LM2937ES-3.3/NOPB
Y1	1	SMT	Crystal, 25Mhz, SMT	ECS	ECS-25-18-5PX
X1	0	Thru	Socket, IC, DIP, 14pin, MP, <b>DO NOT INSTALL</b>	Milmax	110-99-314-41-001000
PCB	1	pcb	PCB, 4 layer, 4.5 x 5.5 inch	Axiom	AXMR0375 Rev D.