

MDD-01C PCBA材料清单
版本号: C2-VN38
PCBA编码: ECUB-PA-000003
最后修改日期: 2019.08.30

序号	PCB位置号	数量	官方物料编号	PCB标号	描述	封装	供应商	制造商编号	值	单位	最小起订	第1替代料	第2替代料
1	C2, C3, C7, C8, C9, C18, C19, C20, C21, C22, C23, C24, C25, C33, C34, C35, C36, C37, C38, C39, C40, C41, C47, C48, C52, C53, C55, C60, C61, C63, C65, C66, C70, C71, C73, C74, C76, C78, C80, C82, C86, C88, C145, C146, C148, C149, C150, C151, C152, C153, C154, C155, C160, C163, C165, C166, C167, C168, C170, C172, C173, C174, C181, C182, C192, C193, C194, C195, C200, C210, C218, C219, C220, C227, C228, C229, C230, C239, C240, C241, C242, C243, C244, C245, C246, C250, C258, C262, C263, C264, C265	90	ELCC-KC-0000024	多层陶瓷电容器MLCC - SMD/SMT CGA 0402 25V 0.1uF X7R 10% AEC-Q200	0402C	TDK	CGA2B3X7R1E104K	100nF/25V				CGA2B3X7R1H104K	CGA2B3X7R1E104M
3	C23	1	ELCC-XL-000011	微处理器 - MCU 32-Bit Embedded MCU 150 MHz, 4MByte	LCFH176	ST	SPC56A480, TCFAR	SPC56A4					
4	C57, C67	2	ELCC-KC-000052	多层陶瓷电容器MLCC - SMD/SMT CGA 0803 250V 470pF COG 5% AEC-Q200	0603C	TDK	CGA3E30G02E47J1	470pF/250V				CGA3E30G02D47J1	
5	C38, C203	2	ELCC-KC-000035	多层陶瓷电容器MLCC - SMD/SMT CGA 0803 50V 0.22uF X7R 10% AEC-Q200	0603C	TDK	CGA3E3X7R1H224K	220nF/50V					
6	D36	1	ELCC-XL-000038	参考电压 Prec MicroPwr Shunt V/A Reference	SOT-23	TI	TL4050A500DBZRQ1	TL4050A500DBZRQ1					
7	C127	1	ELCC-KC-000030	多层陶瓷电容器MLCC - SMD/SMT CGA 0803 50V 0.1uF X7R 10% AEC-Q200	0603C	TDK	CGA3E2C0G2A101J	100pF/100V					
8	C119	1	ELCC-KC-000029	多层陶瓷电容器MLCC - SMD/SMT CGA 0803 100V 0.1uF X7S 10% AEC-Q200	0603C	TDK	CGA3E3X7S2A104K	100nF/100V					
9	C208, C324	2	ELCC-KC-000006	Cap 220uF/10V/7.7V96, 3mm ±20%	F80	ELNA	RZF-10V/221MF80UC-R2	220uF/10V					
10	B1, D2, D6, D9, D10, D11, D12, D26, D27, D28, D29, D30, D31, D32, D33, D34, D35, D36, D39, D44, D46, D47, D16	25	ELCC-KD-000004	桥式整流二极管与散热器 Automotive high voltage power Schottky rectifier	SNB	ON	MURS12013G	MURS12013G					
11	D22, D43	2	ELCC-KD-000007	固定电感器 - FIXED IND 15UH 5A 25 MOHM SMD	SOD128F	ST	STPS5H100AFY	STPS5H100AFY					
12	L3, L4	2	ELCC-XL-000004		IND0483-B	TDK	B8247R44153M100	12.8*12.5*8.5, 15uH					
13	C10, C11, C12, C13, C14, C15, C16, C17, C26, C27, C28, C29, C30, C31, C32, C87, C91, C113, C125, C126, C132, C133, C136, C181, C223, C234, C235, C226, C231, C232, C233, C234, C235, C236, C237, C238, C254, C255, C256, C257, C259, C260, C261, C273, C274, C284, C283, C309, C311, C318, C320, C321, C278	53	ELCC-KC-000032	多层陶瓷电容器MLCC - SMD/SMT CGA 0803 50V 0.01uF X7R 10% AEC-Q200	0603C	TDK	CGA3E2X7R1H104K	10nF/50V					
14	C120, C122, C217, C221, C285, C286, C287, C288, C289, C290, C291, C144, C176, C187, C190, C198, C201, C202, C206, C212, C247, C253, C264, C267, C275, C276, C277, C280, C281, C282, C283, C285, C286, C287, C288, C289, C291, C292, C294, C295, C296, C297, C298, C299, C300, C301, C302, C303, C304, C305, C306, C317, C318	9	ELCC-KC-000009	多层陶瓷电容器MLCC - SMD/SMT CGA 0803 100V 0.01uF SOFT 10% AEC-Q200	0603C	TDK	CGA3E2X7R2A103K	10nF/100V					
15	C255, C264, C267, C275, C276, C277, C280, C281, C282, C283, C285, C286, C287, C288, C289, C291, C292, C294, C295, C296, C297, C298, C299, C300, C301, C302, C303, C304, C305, C306, C317, C318	54	ELCC-KC-000033	多层陶瓷电容器MLCC - SMD/SMT CGA 0803 50V 0.1uF X7R 10% AEC-Q200	0603C	TDK	CGA3E2X7R1H104K	100nF/50V					
16	C45, C49, C50, C54, C56, C64, C66, C77, C79, C81, C83, C92	12	ELCC-KC-000036	多层陶瓷电容器MLCC - SMD/SMT CGA 0803 50V 100pF COG 5% AEC-Q200	0603C	TDK	CGA3E2C0G1H101J	100pF/50V					
17	D13, D17	2	ELCC-KD-000025	Zener Voltage Regulator Diodes	SOT-23	LRC	SLB28X4C5V6L1TG	SLB28X4C5V6L1TG					
18	D3, D14, D16, D17, D41, D42, D45	7	ELCC-KD-000003	二极管 - 通用, 功率, 开关 75V 200mA	SOD-323	ON	BA516HT1G	BA516HT1G					
19	R10, R21, R23, R24, R34, R346, R326	16	ELCC-KR-000059	厚膜电阻器 - SMD ZEROhms 1/10WPER 0603	0603R	KOA	RK73J1J1TD		0R				
20	R172, R173, R176, R177, R180, R187, R188, R198, R201, R206, R208, R212, R215, R287, R283, R284, R285, R286, R287, R288, R289, R290, R291, R292, R293, R294, R295, R322, R323	29	ELCC-KR-000002	厚膜电阻器 - SMD 0.1Watt 150Kohms 1% 0402	0402R	KOA	RK73H1ETTP150SF	150K					
21	R174, R175, R180, R197, R202, R205, R206, R211	8	ELCC-KR-000033	厚膜电阻器 - SMD 1/10Watt 10Kohms 1% 0402	0402R	KOA	RK73H1ETTP100SF	100K					
22	R2, R5, R17, R80, R110, R113, R160, R237	8	ELCC-KR-000034	厚膜电阻器 - SMD 1/10Watt 1.2Kohms 1% 0603	0603R	KOA	RK73H1J1TD1201F	1K2					
23	R236, R240	2	ELCC-KR-000043	厚膜电阻器 - SMD 1/10Watts 10Kohms 1% 0603	0603R	KOA	RK73H1J1TD1004F	1M					
24	R53, R54, R59, R60, R85, R87, R120, R156, R157, R159, R165, R167, R220, R221, R222, R223, R225, R227, R228, R234, R258, R268, R269, R276, R278, R1001	26	ELCC-KR-000040	厚膜电阻器 - SMD 1/10Watts 10Kohms 1%	0603R	KOA	RK73H1J1TD1002F	10K					
25	R6, R160, R151, R242	4	ELCC-KR-000044	厚膜电阻器 - SMD 1/10Watts 22Kohms 1% 0603	0603R	KOA	RK73H1J1TD2202F	22K					
26	R86, R119, R127, R134, R141, R153, R155, R230, R266	9	ELCC-KR-000045	厚膜电阻器 - SMD 1/10Watts 47Kohms 1% 0603	0603R	KOA	RK73H1J1TD4702F	47K					
27	R178, R179, R200, R207, R188, R189	6	ELCC-KR-000007	厚膜电阻器 - SMD 0.1Watts 150ohms 1% 0402	0402R	KOA	RK73H1ETTP150SF	15R					
28	C1, C3, C4, C5, C6, C8, C9, C33, C111, C112, C118, C185, C189, C197, C199, C325	15	ELCC-KC-000042	多层陶瓷电容器MLCC - SMD/SMT CGA 1206 50V 10uF X5R 10% AEC-Q200	1206C	TDK	CGA4S136SR1H104K	10uF/50V				CGA4S136SR1H104M	
29	C168, C161, C175, C180, C209, C251, C322, C1001, C1002	9	ELCC-KC-000042	多层陶瓷电容器MLCC - SMD/SMT CGA 0402 50V 10uF X7R 10% AEC-Q200	0402C	TDK	CGA2B2X7R1H104K	10nF/25V				CGA2B2X7R1E103K	
30	C177, C178	2	ELCC-KC-000037	多层陶瓷电容器MLCC - SMD/SMT CGA 0402 50V 10pF COG 0.50pF AEC-Q200	0402C	TDK	CGA2B2C0G1H100D	10pF/50V				CGA2B2C0G1H150J	
31	C46, C51	2	ELCC-KC-000027	多层陶瓷电容器MLCC - SMD/SMT CGA 0803 50V 470pF X7R 10% AEC-Q200	0603C	TDK	CGA3E2X7R1H472K	47nF/50V					
32	C58, C62, C68, C75, C101, C102, C138, C139, C140, C141, C142, C143, C196, C211, C213, C507, C308, C310, C312, C313, C314, C315, C316	23	ELCC-KC-000048	多层陶瓷电容器MLCC - SMD/SMT SOFT 0603 50V 1000pF X7R 10% AEC-Q200	0603C	TDK	CGA3E2X7R1H102K	1nF/50V					
33	C59, C72, C97, C147, C156, C179, C207, C214, C215, C216, C248, C249, C271, C272	14	ELCC-KC-000039	多层陶瓷电容器MLCC - SMD/SMT CGA 0805 10V 10uF X5R 10% AEC-Q200	0805C	TDK	CGA4J3X5R1A106K	10uF/10V				CGA4J3X7S1C106K	
34	C96, C252, C284	3	ELCC-KC-000041	多层陶瓷电容器MLCC - SMD/SMT CGA 0805 50V 1uF X7R 10% AEC-Q200	0805C	TDK	CGA4J3X7R1H105K	1uF/50V				CGA4J3X7R1H105M	
35	C99, C100, C106, C107, C114, C115, C117, C121, C124, C128, C129, C130, C131, C134, C135, C136, C137, C157, C159, C162, C169, C171	23	ELCC-KC-000026	多层陶瓷电容器MLCC - SMD/SMT CGA 0402 50V 1nF X7R 10% AEC-Q200	0402C	TDK	CGA2B2X7R1H102K	1nF/50V				CGA2B2X7R1H102M	
36	D18, D19	2	ELCC-KD-000002	肖特基二极管与散热器 Automotive power Schottky rectifier	D2PAK	ST	STPS20H100CGY-TR	STPS20H100CGY-TR					
37	D38	1	ELCC-KD-000024	Zener Voltage Regulator Diodes	SOT-23	LRC	SLB28X4C12L1TG	SLB28X4C12L1TG					
38	D4, D5, D6, D7	4	ELCC-KD-000016	ESD 抑制器TVS 二极管 225mW 31.35-34.65V Bi-A common SOT-23 TVS	SOT-23	NXP	MMBZ33VALTG	MMBZ33VALTG					
39	D40	1	ELCC-KD-000022	ESD 抑制器TVS 二极管 700A, 6600V, 36V Unidirectional TVS	DO-218AC	PANJIT	SM8S36A-AU	SM8S36AIE3A1 (VISHAY)	6 6KSMJ36A				

40	L1, L2	2	ELCC-XL-000001	共模扼流圈/非滤波 2000ohms 51uH 200mA CAN-BUS AEC-Q200	IDN0994-Q	TDK	ACT46C-510-2P-TL000	4.5*9.2*51uH	ACT46B-510-2P-TL003	
41	L5	1	ELCC-XL-000006	固定电感器 47uH ±20% 121.15mOhms AEC-Q200	470MHz	TDK	SPM100541-470MHz			
42	Q1, Q2	2	MOSFET N-CH 200mA N-Channel	SOT-23		ON	BSS138LT1G			
43	Q10, Q11, Q13, Q14, Q15, Q16	6	ELCC-XM-000014	MOSFET TRENCH 31V-99V G3	LEPAK66	NXP	BUK6Y19-65B	10*7*10.0*5 4.47uH		
44	Q12	1	ELCC-XM-000009	MOSFET N-CH 100V 50A DPAK-2 OptiMOS-T	DPAK(TO262-3)	Infineon	IPD50N10S3L-16	IPD50N10S3L-16		
45	Q17	1	ELCC-XM-000005	MOSFET PCH 4V DRIVE SERIES	ATPAK	ON	NVAT55A114PLZT4G	NVAT55A114PLZT4G		
46	Q3	1	ELCC-XM-000012	双极晶体管 - 双极晶体管(BJT) SOT-223 PNP GP AMP	SOT223	ON	BCP531TG	BCP531TG		
47	Q4, Q5	2	ELCC-XM-000003	双极晶体管 - 双极晶体管(BJT) SOT-23 NPN GP AMP	SOT-23	ON	BC946ALTG	BC946		
48	Q6, Q7, Q8, Q9	4	ELCC-XM-000014	MOSFET 1A6E13 PWRMOS	DPAK	NXP	BUK9226-75A	BUK9226-75A		
49	R1	1	ELCC-XR-000048	厚膜电阻器 - SMD 14watts 140kOhms 1% 1206	1206R	KOA	RK73H281TD140F	140R		
50	R102	1	ELCC-XR-000061	厚膜电阻器 - SMD 14watts 220kOhms 1% 1206	1206R	KOA	RK73H281TD220F	22R		
51	R108, R170, R181, R183, R192, R194, R204, R207, R210, R213	10	ELCC-XR-000008	厚膜电阻器 - SMD 14watts 220kOhms 1% 1206	1206R	KOA	RK73H281TD220F	200R		
52	R109, R171, R182, R184, R199	5	ELCC-XR-000008	厚膜电阻器 - SMD 0.1watts 200kOhms 1% 0402	0402R	KOA	RK73H1ETTP200F	47R		
53	R196, R306	2	ELCC-XR-000055	厚膜电阻器 - SMD 14watts 5.1 Ohm 1% 0402	1206R	KOA	RK73H281TD5R10F	5R1		
54	R203, R214, R216	3	ELCC-XR-000004	电流传感器电阻器 - SMD 0.01 ohm 1% 100ppm 2512	2512R VMS	VACO	P42512FKCT70R01E	0R01		
55	R219	1	ELCC-XR-000004	厚膜电阻器 - SMD 0R05, 1W ±1% 2512	2512R VMS	KOA	SLJTTE50L0F	0.05R		
56	R23, R24, R25, R26, R27, R28, R29, R30, R31, R32, R33, R34	20	ELCC-XR-000054	厚膜电阻器 - SMD 14watts 30kOhms 1% 1206	1206R	KOA	RK73H281TD3001F	3K		
57	R28, R35, R142, R303, R304, R305, R327, R328	1	ELCC-XR-000052	厚膜电阻器 - SMD 14watts 10kOhms 1% 1206	1206R	KOA	RK73H281TD100F	1R		
58	R3	1	ELCC-XR-000052	厚膜电阻器 - SMD 14watts 240kOhms 1% 1206	1206R	KOA	RK73H281TD240F	249R		
59	R4, R15, R16, R17, R18, R19, R20, R21, R22, R42, R43, R229, R243, R246, R253, R255, R257, R259, R263, R271, R317, R319, R320, R331, R334	25	ELCC-XR-000036	厚膜电阻器 - SMD 1/10watt 100kOhms 1% 0402	0402R	KOA	RK73H1ETTP1003F	100k		
60	R44, R45, R46, R47, R48, R49, R279, R280, R281, R282, R296, R297, R298, R299, R300, R301, R302, R318, R319, R321, R324	21	ELCC-XR-000047	厚膜电阻器 - SMD 14watts 10kOhms 1% 1206	1206R	KOA	RK73H281TD1002F	10K		
61	R52, R55, R59, R61	4	ELCC-XR-000057	厚膜电阻器 - SMD 14watts 61.9kOhms 1% 1206	1206R	KOA	RK73H281TD6150F	61R9		
62	R63, R64, R65, R88, R91, R95, R97, R103, R104, R124, R129, R131, R136, R138, R145, R146, R152, R166, R161, R166, R226, R246	23	ELCC-XR-000039	厚膜电阻器 - SMD 1/10watt 5.1kOhms 1% 0603	0603R	KOA	RK73H1JTD5101F	5K1		
63	R66, R68, R69, R98, R100, R121, R126, R133, R140, R143, R147	11	ELCC-XR-000038	厚膜电阻器 - SMD 1/10watt 2.2kOhms 1% 0603	0603R	KOA	RK73H1JTD2201F	2K2		
64	R67, R68, R70, R74, R94, R99, R102, R106	8	ELCC-XR-000049	厚膜电阻器 - SMD 14watts 15kOhms 1% 1206	1206R	KOA	RK73H281TD1502F	15K		
65	R7, R8, R9, R10, R11, R12, R13, R14, R35, R36, R37, R38, R39, R40, R41, R50, R89, R92, R118, R122, R125, R130, R132, R137, R139, R144, R146, R231, R244, R245, R249, R250, R251, R256, R261, R308, R333	37	ELCC-XR-000042	厚膜电阻器 - SMD 1/10watts 15kOhms 1% 0603	0603R	KOA	RK73H1JTD1502F	15K		
66	R75, R76, R78, R79, R81, R82, R83, R84, R107, R108, R111, R112, R114, R115, R116, R117	16	ELCC-XR-000056	厚膜电阻器 - SMD 14watts 5.1kOhms 1% 1206	1206R	KOA	RK73H281TD5101F	5K1		
67	T1	1	ELCC-XM-000003	双极晶体管 - 双极晶体管(BJT) 2A 50V 12.5W NPN	DPAK	ON	NJ287314G	NJ287314G		
68	U1, U2	2	ELCC-XL-000020	线性稳压 ANA 500mA ADJUST OUT VREG	DPAK	ON	NCV317MBDTRKG	NCV317MBDTRKG		
69	U123	1	ELCC-XL-000006	电动机电力驱动器 - 调速器 Auto Cal Common - 20V/V 500kHz	SOT23-5	TI	INA193AQDBVRQ1	INA193AQDBVRQ1		
70	U16	1	ELCC-XL-000013	马达驱动器 占空比控制器和反馈 PWMTRN H-BRIDGES	P-D-SO-20-12	Infineon	TL6209R	TL6209R		
71	U17	1	ELCC-XL-000023	电源开关 I/O 控制 POCFET	P-D-SO-14W	Infineon	BT6020-1EKA	BT6020-1EKA		
72	U18	1	ELCC-XL-000030	马达驱动器 无刷电机控制 Programmable solenoid controller, 6 - solenoid	LOP-64	NXP	MC33816AER2	MC33816AER2		
73	U19	1	ELCC-XL-000033	IC LOW SIDE SWITCH 18CHAN MOSFET4	HIQ/LAD64	Bosch	CJ945	CJ945		
74	U22	1	ELCC-XL-000015	专业电感器 (EMC) DC/DC CONVERTER	P-D-SO-36-24 M	Infineon	TL6286-3E	TL6286-3E		
75	U23	1	ELCC-XM-000011	MOSFET N-CH 70V 5A ONFET	DPAK	ST	VND6N07TRE	VND6N07TRE		
76	U3	1	ELCC-XM-000001	板级接口电力转换器 PRESURE SENSORS	PG-DSOF-8-16	Infineon	KP214E2811	KP214E2811		
77	U4, U5	2	ELCC-XU-000024	集成电路 CAN 接口 - Hi Spd CAN Transceiv 4.5V-5.5V 250ms	SOT-8	NXP	TJA1051T73	TJA1051T73		
78	U6, U9	2	ELCC-XU-000022	传感器接口 Variable Reluctance 传感器接口	10 JMAX	MAXIN	MAX9224UAB+T	MAX9224UAB+T		
79	U7, U10, U12, U13, U15	6	ELCC-XU-000001	二极管 - 通用, 功率, 开关 70V 215mA Dual	SOT-23	ON	BAV99LT1G	BAV99LT1G		
80	U8, U11, U14	3	ELCC-XU-000008	模拟比较器 Auto Cal Dual Diff Comparator	SOT-8	TI	LM293QDRQ1	LM293QDRQ1		
81	X1	1	ELCC-XO-000003	晶体 CRYSTAL 12MHz 8P SMD	XG032GA	NDK	NX6032GA-12.000M-	NX6032GA-12.000M-		
82	C164, C186, C326	3	ELCC-XC-000007	Cap 470uF 50V 20*12.5mm ±20%	RPK-12.5	ELNA	RPK-50V470 1M50MHC-52	470uF 50V		
83	C18	1	ELCC-XC-000008	Cap 470uF 63V 20*16mm ±20%	RPK-16.0	ELNA	RPK-63V470 1M50MHC-52	470uF 63V		
84	J1	1	ELCC-CN-000002	汽车连接器 MOD3/IFLA-ST108+13	C-124/434	TE	IE-124/434-1	121pin		

绘制:

校核:

批准: