



BILL OF MATERIALS

PRODUCT CODE: EVAL-L9945 R3.0	Rev	0
PRODUCT NAME: L9945 EVALUATION BOARD	Date	21.01.2019
CUSTOMER: ST MICROELECTRONICS	Quantity	

Description	Value	Tolerance	Rating	Specifcat	R.F.P.	Ord	Arr	Package	Manufacturer	Part Number	Cross Reference	Distributor	Order Code	UM	Qty	Designator	Notes
PRINTED CIRCUIT BOARD	EVAL-L9945 R3.0									EVAL-L9945 R3.0				NR	1		
SMD RESISTOR	0 Ohm							R0805-RS						NR	8	R34, R35, R36, R63, R64, R65, R66, R67	DO NOT POPULATE
SMD RESISTOR	0.022 Ohm	1%	1W					R2512-RS	MULTICOMP	MCCSM12FTDTR022		FN	2483608	NR	6	R11, R19, R49, R50, R61, R62	
SMD RESISTOR	0.033 Ohm	1%	1W					R2512-RS	MULTICOMP	MCCSM12FTDTR033		FN	2294089	NR	2	R12, R20	
SMD RESISTOR	0.050 Ohm	1%	0.125W					R0805-RS	BOURNS	CRL0805-FW-R050ELF		RS	740-9145P	NR	12	R15, R16, R23, R24, R41, R42, R45, R46, R53, R54, R57, R58	
SMD RESISTOR	47 Ohm	5%						R0603-RS						NR	8	R13, R18, R21, R26, R43, R44, R55, R56	
SMD RESISTOR	220 Ohm	5%						R0805-RS						NR	1	R69	
SMD RESISTOR	1k Ohm	5%						R0603-RS						NR	13	R2, R3, R4, R5, R27, R28, R29, R30, R31, R32, R33, R37, R38	
SMD RESISTOR	1k Ohm	5%						R0805-RS						NR	1	R7	
SMD RESISTOR	3.9k Ohm	5%						R0805-RS						NR	4	R39, R40, R51, R52	
SMD RESISTOR	4.7k Ohm	5%						R0603-RS						NR	1	R6	
SMD RESISTOR	10k Ohm	5%						R0603-RS						NR	2	R1, R10	
SMD RESISTOR	10k Ohm	5%						R0805-RS						NR	1	R9	
SMD RESISTOR	47k Ohm	5%						R0603-RS						NR	8	R14, R17, R22, R25, R47, R48, R59, R60	
SMD RESISTOR	47k Ohm	5%						R0805-RS						NR	1	R8	
SMD RESISTOR	100k Ohm	5%						R1206-RS						NR	1	R68	
SMD CERAMIC CAPACITOR	470pF	10%	100V	X7R				C0805-B	KEMET	C0805C47J1GACTU		RS	298-9292P	NR	8	C31, C34, C37, C40, C43, C44, C47, C48	
SMD CERAMIC CAPACITOR	1nF	10%	16V	X7R				C0603-B	TDK	CGA3E2COG1H102J080AA				NR	3	C8, C9, C10	DO NOT POPULATE
SMD CERAMIC CAPACITOR	10nF	10%	100V	X7R				C0603-B	TDK	CGA3E2X7R2A103K080AA				NR	8	C19, C27, C35, C36, C41, C42, C45, C46	
SMD CERAMIC CAPACITOR	47nF	10%	100V	X7R				C0805-B	TDK	CGA4J2X7R2A473K125AA				NR	4	C32, C33, C38, C39	
SMD CERAMIC CAPACITOR	220nF	10%	100V	X7R				C0805-B/C						NR	4	C1, C2, C17, C18	
SMD CERAMIC CAPACITOR	470nF	10%	100V	X7R				C1206-B	TDK	CGA5L2X7R2A474K160AA				NR	1	C3	
SMD CERAMIC CAPACITOR	2.2uF	10%	100V	X7R				C1210-B	TDK	CGA6N3X7R2A225K230AB				NR	1	C26	
THT RADIAL ELECTROLYTIC CAPACITOR	100uF	20%	100V					CAP, 10X16mm	PANASONIC	ECA2AAM101X		FN	9593947	NR	2	C28, C29	
SMD INDUCTOR	3.3uH	20%	2Ah					B82462A4 SERIES	EPCOS/TKD	B82462A4332M000				NR	1	L1	
SMD DIODE LED - RED				RED				0805 LED						NR	1	D24	
SMD DIODE RECTIFIER	ESH2D-E3/52 BT		200V/2Ah					SMB	VISHAY	ESH2D-E3/52 BT				NR	6	D1, D3, D8, D10, D16, D17	
SMD ULTRA-FAST DIODE	ES07B-GS18		100V/1.2Ah					DO-219AB	VISHAY	ES07B-GS18		FN	1612357	NR	4	D4, D6, D18, D19	
SMD TVS DIODE - BIDIRECTIONAL	SMAJ54CA		54V					DO-214AC	MULTICOMP	SMAJ54CA+		FN	2675316	NR	1	D7	
SMD DIODE SCHOTTKY RECTIFIER	SS8PH10-M3/86A.		100V/8Ah					TO-277A	VISHAY	SS8PH10-M3/86A.		FN	2335175	NR	2	D9, D11	
SMD STANDARD RECOVERY DIODE - SINGLE	S1B-E3/5AT		100V/Ah					SMA	VISHAY	S1B-E3/5AT		FN	9550224	NR	4	D12, D13, D20, D21	
SMD SMALL SIGNAL DIODE	LL4148		100V/150mAh					MINIMELEF3	MULTICOMP	LL4148		FN	7355513	NR	4	D14, D15, D22, D23	
SMD DIODE ZENER	MMSZ5266BT1G		68V					SOD-123	ON SEMICONDUCTOR	MMSZ5266BT1G		FN MO	1150494 863-MMSZ5266BT1G	NR	4	DZ1, DZ2, DZ5, DZ6	
SMD DIODE ZENER	MMSZ5262BT1G		51V					SOD-123	ON SEMICONDUCTOR	MMSZ5262BT1G		FN	1431289	NR	4	DZ3, DZ4, DZ7, DZ8	
SMD DIODE ZENER	BZV55-C15,115		15V					MINIMELEF3	NEXPEdia	MMSZ5262BT1G		RS	544-4556P	NR	1	DZ9	
GOUTTE CONTACTS/JUMPER A SALDARE								JUMP A SALDARE						NR	2	J3, J4	CLOSE
HEADER 2X1 - MALE	p. 2.54mm		2 POLES	MALE				SIP2						NR	25	J2, J14, J15, J16, J17, J20, J21, J22, J23, J24, J25, J26, J27, J28, J29, J30, J31, J34, J35, J36, J37, J38, J39, J40, J41	
HEADER 3X1 - MALE	p. 2.54mm		3 POLES	MALE				SIP3						NR	1	J11	
HEADER 18X1 - MALE	p. 2.54mm		18 POLES	MALE				SIP18						NR	1	J12	
HEADER 36X4 - FEMALE	p. 2.54mm		144 POLES	FEMALE				IDC36X4	SAMTEC	ESQ-136-12-G-D		FN	1769255	NR	2	J1	ONLY FEMALE HEADER 36X4 ON BOTTOM LAYER
CONNECTOR CART 2 POLES	p. 5.08mm		2 POLES	h=14mm				CON2						NR	9	J10, J44, J45, J46, J47, J48, J49, J50, J51	
CONNECTORE CART 2 POLES	p. 7.62mm		2 POLES					GMKDS 3/2-7.62						NR	1	J6	
RING TEST POINT								TEST POINT						NR	4	TP65, TP66, TP67, TP68	
SMD TEST POINT	S1751-46R							S1751-46R	HARWIN	S1751-46R		FN	2293786	NR	65	TP1, TP2, TP3, TP4, TP5, TP6, TP7, TP8, TP9, TP10, TP11, TP12, TP13, TP14, TP15, TP6, TP17, TP18, TP19, TP20, TP21, TP22, TP23, TP24, TP25, TP26, TP27, TP28, TP29, TP30, TP31, TP32, TP33, TP34, TP35, TP36, TP37, TP38, TP39, TP40, TP41, TP42, TP43, TP44, TP45, TP46, TP47, TP48, TP49, TP50, TP51, TP52, TP53, TP54, TP55, TP56, TP58, TP59, TP60, TP61, TP62, TP80, TP81, TP93, TP94	DO NOT POPULATE: TP59, TP60, TP61 AND TP62
SMD NPN TRANSISTOR	BC847							SOT-23						NR	1	T1	
SMD DUAL NPN TRANSISTOR	BC846BDW1T1G							SOT-363	ON SEMICONDUCTOR	BC846BDW1T1G		FN	2317636	NR	1	Q1	
SMD POWER MOSFET N-CH	STD105N10F7AG		100V/80Ah					DPAK	ST MICROELECTRONICS	STD105N10F7AG		MO	511-STD105N10F7AG	NR	6	M1, M2, M3, M5, M7, M8	

SMD POWER MOSFET P-CH	STD10PF06T4		-60V / -10A		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DPAK	ST MICROELECTRONICS	STD10PF06T4 (OBSOLETE)	STD10P6F6	MO RS	511-STD10P6F6 917-2747	NR	2	M4, M6	
SMD POWER MOSFET N-CH	STB100NF04T4				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	D2PAK	ST MICROELECTRONICS	STB100NF04T4		MO	511-STB100NF04T4	NR	1	M9	
SOCKET FOR L9945	IC357-0644-14L-*.*				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	IC357-0644-14L-*.* *	YAMAICHI	IC357-0644-14L-*.*				NR	1	U3	PROVIDED BY CUSTOMER
DEVICE	L9945				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	TQFP64 (10X10) 0.5 pitch - EXPAD	ST MICROELECTRONICS	L9945				NR	1	U1	PROVIDED BY CUSTOMER
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							NR			

INFORMATION ABOUT MECHANICAL PARTS

CONFIGURATION JUMPER	p. 2.54mm		2 POLES	FEMALE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							NR	26		PACKED IN BAG
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							NR			

INFORMATION ABOUT SPARE PARTS

NYLON SPACERS 10mm				FEMALE/FEMALE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							NR	4		PACKED IN BAG
NYLON SPACERS 8mm				MALE/FEMALE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							NR	4		PACKED IN BAG
METAL SCREW M3X10					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							NR	4		PACKED IN BAG
METAL WASHERS M3					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							NR	4		PACKED IN BAG

Legend:

FN=Farnell, RS=RS Components, MO=Mouser, DK=Digikey, AR=Arrow, AX=AvNet Express, NW=Newark, OL=ON Line componets

A = Automotive and Aeronautical, I = Industrial, C = Commercial