

Eval Board Name	SI8284-EVB
Revision	6.1

CreationDate	Proto Rev	Released
1/19/2021	1.00	1

End product must be RoHS compliant

NI	Quantity	Reference	Value	Rating	Voltage	Tolerance	Type	PCB_Footprint	ManufacturerPN	Manufacturer
	1	C10	1.5nF		250V	±10%	X7R	C0805	C0805X7R251-152K	Venkel
	2	C12 C14	2.2uF		50V	±10%	X7R	C1210	C1210C225K5RACTU	Kemet
	1	C16	390pF		50V	±10%	C0G	C0603	C0603C0G500-391K	Venkel
	2	C2 C20	100pF		50V	±20%	C0G	C0603	C0603C0G500-101M	Venkel
	1	C22	1uF		100V	±10%	X7R	C1210	C1210X7R101-105K	Venkel
	1	C23	0.22uF		25V	±10%	X7R	C0603	C0603X7R250-224K	Venkel
	1	C24	0.01uF		10V	±20%	X7R	C0603	C0603X7R100-103M	Venkel
	6	C41 C42	10uF		50V	±20%	X7R	C1210	C1210X7R500-106M	Venkel
	2	C31 C32	22pF		50V	±5%	C0G	C0603 C0603L	C0603C220J5GAC7013	KEMET
	2	C33 C34	22pF		50V	±5%	C0G	C0603	C0603C0G500-220J	Venkel
	3	C36 C37 C38	0.1uF		50V	±10%	X7R	C0603	CC0603KPX7R9BB104	Yageo
	7	C15 C19	0.1uF		50V	±10%	X7R	C0805	C0805X7R500-104K	Venkel
	1	C43	220nF		50V	±5%	C0G	C1812	C1812C0G500-224JNE	Venkel
	1	C44	270pF		2500V	±5%	C0G	C1812	C1812C271JZGACTU	Kemet
	2	C46 C47	10µF		1000V	±5%	PolyFilm	C52.5-57.5X33	MKP1848S61010JY2B	Vishay
	4	D1 D2 D22 D23	MBR1H100SF	1A	100V		Schottky	SOD123	MBR1H100SF	On Semi
	1	D10	RB160MM-30TF	1A	30V		Schottky	SOD123	RB160MM-30TF	Rohm Semiconductors
	1	D18	RED					LED0805-KA	LTST-C170KRKT	LITE-ON TECHNOLOGY CORP
	1	D19	MBRA340T3G	3A	40V		Schottky	DO-214AC	MBRA340T3G	On Semiconductor
	1	D24	15V	500mW	15V	5%	Zener	SOD123	MMSZ4702T1G	On Semi
	1	D25	24V	1000mW	24V		Zener	DO-214AC	SMAZ24-13-F	Diodes Inc.
	2	D3 D20	US1M-13-F	1A	1000V	NA	DIODE	DO-214AC	US1M-13-F	Diodes Incorporated
	1	D4	5.6V	200mW	5.6V	7%	Zener	SOD-323	BZT52C5V6S-F-7	DIODES INC
	5	D17	GREEN	30mA	2.2V		SMT	LED-0805-K	LTST-C170GKT	LITE_ON INC
	3	D9 D11 D14	1N4148W	2A	100V		Fast	SOD123	1N4148W	Diodes Inc
	1	FB1	600 Ohm	2500mA			SMT	L1206	742792118	Würth
	2	J1 J3	3x5mm	10A	300V		Terminal Block	CONN-1X3-TB	1729021	Phoenix Contact
	3	J12 J13 J16	SMA				SMA	CONN-SMA-RT	142-0701-301	Johnson Components
	4	J17 J18 J19 J21	9.5x9.7mm	15A			Terminal Block	CONN-8174	8174	Keystone Electronics
	1	J20	BNC	300VAC			BNC	CONN-BNC-TESTLEAD	BU-5200-A-4-0	Mueller Electric Co
	7	JP8 JP10 JP11	HEADER 1X2				Header	CONN1X2	TSW-102-07-T-S	Samtec
	2	JP9 JP12	HEADER 1x3				Header	CONN-1X3	TSW-103-07-L-S	Samtec
	8	JS5 JS6 JS7 JS8	Jumper Shunt				Shunt	N/A SHUNT	SNT-100-BK-T	Samtec
	1	LB1	SPDSAT				POLYIMIDE, WHITE	PTL-14-477	LABEL-SPDSAT	Skyworks
	1	LB2	DSATDIS				POLYIMIDE, WHITE	PTL-14-477	LABEL-DSATDIS	Skyworks
	6	MH4 MH5 MH6	4-40				SCREW	MH-125 MH-125NP	NSS-4-4-01	Richco Plastic Co
	1	PCB1	SI8284-EVB REV 6.0				BARE PCB	N/A	SI8284-EVB REV 6.0	Skyworks
	1	Q2	FDT3612	3.7A	100V		N-CHNL	SOT223-GDS	FDT3612	Fairchild
	1	Q3	MMBT2222LT1	600mA	30V		NPN	SOT23-BEC	MMBT2222LT1	On Semi
	1	Q4	ZXTN2010ZTA	5A	60V		NPN	SOT89-BCE	ZXTN2010Z	Diodes Inc.
	1	Q5	ZXTP2012ZTA	-4.3A	-60V		PNP	SOT89-BCE	ZXTP2012Z	Zetex
	2	Q6 Q10	MMBT2907A	600mA	60V	MMBT2907A	PNP	SOT23-BEC	MMBT2907A	Diodes Inc.
	1	Q7	ZXTP2027FTA	-4A	-60V		PNP	SOT23-BEC	ZXTP2027FTA	Diodes Inc

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	1	R1	145K	1/10W		±1%	MetalFilm	R0603	RN73H1JTTD1453F100	KOA Speer
	2	R13 R45	0	2A			ThickFilm	R0805	CR0805-10W-000	Venkel
	1	R14	5.1K	1/4W		±1%	ThickFilm	R0805	RK73H2ATTD5101F	KOA Speer
	1	R15	0.1	1/2W		±1%	ThickFilm	R1206	LCR1206-R100F	Venkel
	1	R2	8.66K	1/16W		±1%	ThickFilm	R0603	CR0603-16W-8661F	Venkel
	1	R20	18.7K	1/16W		±1%	ThickFilm	R0603	CR0603-16W-1872F	Venkel
	1	R22	10K	1/10W		±5%	ThickFilm	R0603	CR0603-10W-103J	Venkel
	1	R23	0	1A			ThickFilm	R0603 R0603L	CR0603-16W-000	Venkel
	1	R25	2K	1/10W		±1%	ThickFilm	R0603	CR0603-10W-2001F	Venkel
	1	R26	13.0K	1/16W		±1%	ThickFilm	R0603	CR0603-16W-1302F	Venkel
	1	R27	2.2K	1/10W		±5%	ThickFilm	R0805	CR0805-10W-222J	Venkel
	1	R3	100K	1/10W		±1%	ThickFilm	R0603	CR0603-10W-1003F	Venkel
	1	R35	50	1/10W		±1%	ThinFilm	R0603	CRCW060350R0FKEA	Vishay Dale
	2	R38 R42	3.0	1W		±1%	ThickFilm	R2010	CRCW20103R00FKEFHP	Vishay
	2	R39 R58	10	1/4W		±1%	ThickFilm	R1206	CR1206-4W-10R0F	Venkel
	3	R4 R5 R18	100	1/10W		±1%	ThickFilm	R0603 R0603L	CR0603-10W-1000F	Venkel
	1	R40	20	1/4W		±1%	ThickFilm	R1206	CR1206-4W-20R0FT	Venkel
	2	R41 R44	100	1/10W		±1%	ThickFilm	R0805	CR0805-10W-1000F	Venkel
	1	R43	4.02	1/4W		±1%	ThickFilm	R1206	CR1206-4W-4R02F	Venkel
	1	R46	0.05	2W		±1%	Metal	R2816	WSL2816R0500FEH	VishayDale
	3	R48 R49 R50	0	4A			ThickFilm	R1210	CR1210-4W-000	Venkel
	5	R75 R77	0	2A			ThickFilm	R1206	CR1206-4W-000	Venkel
	1	R53	10K	1/10W		±1%	ThickFilm	R0603	CR0603-10W-1002F	Venkel
	1	R54	1K	1/10W		±1%	ThickFilm	R0603	CR0603-10W-1001F	Venkel
	2	R55 R56	3K	1/4W		±1%	ThickFilm	R1206	ERJ-8ENF3001V	Panasonic
	1	R59	10.0	2W		±0.5%	ThickFilm	R2512	CR2512-2W-10R0D	Venkel
	5	R24	10K	1/16W		±1%	ThickFilm	R0603	CR0603-16W-1002F	Venkel
	10	R66 R67 R68	200K	1/4W		±1%	ThickFilm	R1206	RC1206FR-07200KL	Venkel
	1	R73	5m				Resistor	RES-RW1S0	RW1S0BAR005JE	Ohmite
	1	R74	5.1	1/4W		±1%	ThickFilm	R1206	RC1206FR-075R1L	Yageo
	1	R76	165K	1/16W		±1%	ThickFilm	R0603	CR0603-16W-1653F	Venkel
	1	S1	MOMENTARY				Tactile	SW4N6.5X4.5-PB	EVQ-PAD04M	PANASONIC CORP
	6	SO4 SO5 SO6	STANDOFF				STANDOFF		1902D	Keystone Electronics
	1	T2	20uH	1.4A	-9V - 15V		Power transformer	XFMR-TA7618-AL	TTER09-1175SG	Mentech
	8	TP6 TP7 TP8 TP9	BLACK				Loop	TESTPOINT	151-203-RC	Kobiconn
	8	TP13 TP14 TP15	WHITE				Loop	TESTPOINT	151-201-RC	Kobiconn
	5	TP18 TP19	TESTPOINT				TESTPOINT	TP_MINIATURE_SMT	5019	Keystone
	1	U2	Si8284DD-IS				ISOLATOR	SO24N10.3P1.27	Si8284DD-IS	Skyworks

Not Installed Components

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NI	2	C35 C45	10µF		1000V	±5%	PolyFilm	C52.5X20.3-57.5X33	MKP1848S61010JY5B	Vishay
NI	1	C48	270pF		2500V	±5%	C0G	C1812	C1812C271JZGACTU	Kemet
NI	1	D21	3.0V	500mW	3.0V	5%	Zener	SOD123	MMSZ4683T1G	On Semi

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NI	1	HS1	CR101-50-AE				TH	HEATSINK-CR101-50	CR101-50-AE	Ohmite
NI	1	HW1	CLA-TO-21E				TH	none	CLA-TO-21E	Ohmite
NI	1	J15	BNC	400 MHz			BNC	RES-SDN	SDN-414-01	T&M Research
NI	2	Q1-1 Q8-1	C3M0016120D	115A	1200V		N-CHNL	TO247-GDS-UP	C3M0016120D	CREE
NI	2	Q1-2 Q8-2	C3M0016120K	115A	1200V		N-CHNL	TO247-4-DS3G-UP	C3M0016120K	CREE
NI	1	R10	15	1/4W		±5%	ThickFilm	R1206	CR1206-4W-150J	Venkel
NI	1	R11	10	1/4W		±1%	ThickFilm	R1206	CR1206-4W-10R0F	Venkel
NI	2	R12 R52	0	2A			ThickFilm	R1206	CR1206-4W-000	Venkel
NI	1	R19	0	2A			ThickFilm	R0805	CR0805-10W-000	Venkel
NI	1	R36	0	1A			ThickFilm	R0603 R0603L	CR0603-16W-000	Venkel
NI	1	R60	100	1/10W		±1%	ThickFilm	R0805	CR0805-10W-1000F	Venkel
NI	1	R61	12	1/4W		±5%	ThickFilm	R1206	CR1206-4W-120J	Venkel
NI	1	T3	25uH	2.5A			Power transformer	XFMR-UTB02240S	UTB02253s	UMEC