

Eval Board Name	SI34071-FW-5V-C8
Revision	3.1

CreationDate	Proto Rev	Released
9/28/2020	3.00	1

End product must be RoHS compliant

NI	Quantity	Reference	Value	Rating	Voltage	Tolerance	Type	PCB Footprint	ManufacturerPN	Manufacturer
	4	C1 C6 C40 C42	1nF		2000V	±5%	X7R	C1206	C1206C102JGRAC TU	Kemet
	1	C108	0.1uF		25V	±10%	X7R	C0603	C0603X7R250-104K	Venkel
	1	C109	1nF		100V	±10%	X7R	C0603	C0603X7R101-102K	Venkel
	1	C111	47pF		100V	±10%	X7R	C0603	C0603X7R101-470K	Venkel
	2	C112 C113	1uF		6.3V	±10%	X5R	C0603	C0603X5R6R3-105K	Venkel
	1	C14	47uF		100V	±20%	Alum_Elec	C3.5X8MM-RAD	ECA2AM470	Panasonic
	5	C15 C17 C18 C19	4.7uF		100V	±10%	X7R	C1210	C1210X7R101-475KNE	Venkel
	3	C16 C21 C33	0.1uF		100V	±10%	X7R	C0603	C0603X7R101-104K	Venkel
	6	C2 C3 C4 C5 C107	0.01uF		100V	±10%	X7R	C0603	C0603X7R101-103K	Venkel
	1	C22	1uF		16V	±10%	X5R	C0603	C0603X5R160-105K	Venkel
	3	C23 C24 C25	100uF		6.3V	±10%	X5R	C1210	C1210X5R6R3-107K	Venkel
	1	C26	1000uF		6.3V	±20%	Alum_Elec	C3.5X8MM-RAD	ECA01M102	Panasonic
	1	C27	0.022uF		50V	±20%	X7R	C0603	C1608X7R1H223M	TDK Corporation
	1	C29	0.1uF		100V	±10%	X7R	C0805	C0805X7R101-104K	Venkel
	1	C30	0.047uF		250V	±10%	X7R	C1206	C1206X7R251-473K	Venkel
	1	C31	220nF		16V	±5%	X7R	C0603	C0603C224J4RACTU	Kemet
	2	C37 C47	1uF		50V	±10%	X7R	C0805	CL21B105KBFNNNE	Samsung
	1	C38	2.2uF		10V	±10%	X7R	C0603	C0603X7R100-225K	Venkel
	1	C39	0.01uF	-55°C to +150°C	25V	±10%	X8R	C0603 C0603L	C0603C103K3HACAUTO	KEMET
	1	C41	1nF		25V	±10%	X5R	C0603	C0603X5R250-102K	Venkel
	1	C45	0.1uF		10V	±10%	X7R	C0603 C0603L	C0603X7R100-104K	Venkel
	1	C46	1nF		50V	±5%	C0G	C0603	C0603C0G500-102J	Venkel
	1	C48	0.1uF		50V	±10%	X7R	C0805	C0805X7R500-104K	Venkel
	1	D102	BAV99	300mA	100V		Dual, Switch	SOT23-AKC	BAV99-7-F	Diodes Inc.
	1	D103	10V	500mW	10V	5%	Zener	SOD-123	MMSZ4697T1G	On Semi
	1	D104	Yellow	15mA				LED-0603	TLMY1000-GS08	Vishay
	1	D13	16V	500mW	16V	5%	Zener	SOD-123	MMSZ4703T1G	On Semi
	1	D16	15V	500mW	15V	5%	Zener	SOD123	MMSZ4702T1G	On Semi
	1	D5	ES1B	1.0A	100V		Fast	DO-214AC	ES1B	Diodes Inc.
	1	D6	ES1C	1.0A	150V		Fast	DO-214AC	ES1C	Diodes Inc.
	6	D8 D11 D12 D14	1N4148W	300mA	100V		Single	SOD-123	1N4148W-7-F	Diodes Inc.
	1	D9	GREEN	5mA	2.0V		SMT	LED-0603	SML-LXFP0603SUGCTR	LUMEX INC
	2	FB1 FB2	600 Ohm	2500mA			SMT	L1206	742792118	Wurth
	2	J1 J2	RJ-45				Receptacle	RJ45-95001	95001-2881	MOLEX
	1	J103	3X2 Shrouded Header				Shrouded	CONN2X3-4W	30306-6002HB	3M
	2	J4 J5	BND_POST	15A			BANANA	BANANA-JACK	101	ABBATRON HH SMITH
	1	L1	250 uH	0.035 ohm	80VDC		Ethernet	IND-744272251	744272251	Würth
	1	L2	2.2uH	2A		±20%	Unshielded	IND-8400	84222C	Murata
	1	L3	3.3uH	25A		±20%	Shielded	IND-XAL1010	XAL1010-332MEB	Coilcraft
	1	L4	1mH	0.2A		±20%	Shielded	IND-2020-WURTH	74404054102	Würth Elektronik
	1	LB1	LABEL-SI34071-FW-5V-C8 R3.1				POLYIMIDE, WHITE	PTL-14-717	LABEL-SI34071-FW-5V-C8 R3.1	Skyworks
	4	MH1 MH2 MH3	4-40				SCREW	MH-125 MH-125NP	NSS-4-4-01	Richco Plastic Co
	1	PCB1	SI34071-FW-5V-C8 REV 3.0				BARE PCB	N/A	SI34071-FW-5V-C8 REV 3.0	Skyworks

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	2	Q1 Q2	FDMQ8205A	3.4A, -2.6A	100V		Bridge Rectifier	DFN12N4.5X5.0P0.8EX4	FDMQ8205A	OnSemi
	3	Q103 Q104 Q105	MMBTA56L	500mA	-80V		PNP	SOT23-BEC	MMBTA56L	On Semi
	3	Q106 Q107 Q108	MMBTA06LT1	500mA	80V		NPN	SOT23-BEC	MMBTA06LT1	On Semi
	1	Q4	FCX491TA	2A	60V		NPN	SOT89-BCE	FCX491TA	Diodes Inc.
	1	Q5	MMBT3904	200mA	40V		NPN	SOT23-BEC	MMBT3904	Fairchild
	1	Q6	SQJ476EP-T1	23A	100V		N-CHNL	POWER56	SQJ476EP-T1_GE3	Vishay
	1	Q7	FDMC2523P	-3.0A	-150V		P-CHNL	POWER33	FDMC2523P	Fairchild
	8	R1 R2 R3 R4 R5	75	1/16W		±0.5%	ThinFilm	R0603	RR0816Q-750-D	Susumu
	1	R109	3.65K	1/16W		±1%	ThickFilm	R0603	CR0603-16W-3651FT	Venkel
	4	R110 R113 R119	100K	1/10W		±1%	ThickFilm	R0603	CR0603-10W-1003F	Venkel
	2	R111 R112	20.0K	1/16W		±1%	ThickFilm	R0603	CR0603-16W-2002F	Venkel
	1	R114	127	1/10W		±1%	ThickFilm	R0603	CR0603-10W-1270F	Venkel
	1	R115	255	1/10W		±1%	ThickFilm	R0603	CR0603-10W-2550F	Venkel
	2	R116 R122	10K	1/16W		±1%	ThickFilm	R0603	CR0603-16W-1002F	Venkel
	2	R117 R118	49.9K	1/10W		±1%	ThickFilm	R0603	CR0603-10W-4992F	Venkel
	1	R120	41.2K	1/10W		±1%	ThickFilm	R0603	CR0603-10W-4122F	Venkel
	1	R121	200K	1/10W		±5%	ThickFilm	R0603	CR0603-JW-204ELF	Bourns
	1	R123	1.20K	1/10W		±1%	ThickFilm	R0603	CR0603-10W-1201F	Venkel
	1	R127	330	1/16W		±1%	ThickFilm	R0603	CR0603-16W-3300F	Venkel
	1	R128	560	1/10W		±1%	ThickFilm	R0603	CR0603-10W-5600F	Venkel
	1	R129	120K	1/10W		±1%	ThickFilm	R0603	CR0603-10W-1203F	Venkel
	1	R32	3.0	1/10W		±5%	ThickFilm	R0603	CR0603-10W-3R0JT	Venkel
	1	R33	95.3K	1/16W		±1%	ThickFilm	R0603	CR0603-16W-9532F	Venkel
	4	R34 R125 R130	1K	1/10W		±1%	ThickFilm	R0603	CR0603-10W-1001F	Venkel
	2	R36 R40	10.0	1/16W		±1%	ThickFilm	R0603	CR0603-16W-10R0F	Venkel
	1	R37	2.2K	1/4W		±5%	ThickFilm	R1206	CR1206-4W-222JT	Venkel
	1	R41	3.24K	1/10W		±1%	ThickFilm	R0603	CR0603-10W-3241F	Venkel
	1	R42	2.15K	1/10W		±1%	ThickFilm	R0603	CR0603-10W-2151F	Venkel
	1	R43	24K	1/10W		±1%	ThickFilm	R0603	ERJ-3EKF2402V	Panasonic
	1	R44	36.5K	1/16W		±1%	ThickFilm	R0603	CR0603-16W-3652F	Venkel
	1	R45	3.3K	1/10W		±1%	ThickFilm	R0805	CR0805-10W-3301F	Venkel
	2	R48 R124	24.9K	1/10W		±1%	ThickFilm	R0603	CR0603-10W-2492F	Venkel
	2	R49 R50	0	1A			ThickFilm	R0603 R0603L	CR0603-16W-000	Venkel
	1	R51	12.1K	1/16W		±1%	ThickFilm	R0603	CR0603-16W-1212F	Venkel
	1	R52	0.039	1W		±1%	ThickFilm	R1206	ERJ-8CWFR039V	Panasonic
	1	R54	510	1/10W		±1%	ThickFilm	R0603	CR0603-10W-5100F	Venkel
	1	R55	0.1	1/2W		±1%	ThickFilm	R1206	LCR1206-R100F	Venkel
	1	R56	10K	1/8W		±1%	ThickFilm	R0805	CR0805-8W-1002F	Venkel
	1	R57	3	1/8W		±1%	ThickFilm	R0805	CR0805-8W-3R00FT	Venkel
	4	SO1 SO2 SO3	STANDOFF				STANDOFF		2397	SPC Technology
	1	T1	7490220122	350uH			Ethernet	ETH-7490220121	7490220122	Würth
	1	T2	LDT1056-51	70W	5V		FORWARD	XFMR-LDT1056-50	LDT1056-51	LinkCom
	38	TP1 TP2 TP3 TP4	BLACK				Loop	TESTPOINT	151-203-RC	Kobiconn

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	1	U103	AP2120N-3.3	100mA	3.3V		LDO	SOT-23	AP2120N-3.3	Diodes Inc.
	1	U11	FAN3100CSX	4A			Gate Driver	SOT23-5N	FAN3100CSX	ON Semiconductor
	1	U5	SIR632DP-T1	29A	150V		N-CHNL	POWER56	SIR632DP-T1-RE3	Vishay
	1	U6	Si34071		120V		PD	QFN32N5X5P0.5E3.5	Si34071-A01-GM	Skyworks
	3	U7 U102 U104	FOD817C3SD					SO4N10.16P2.54-AKEC	FOD817C3SD	Vishay
	2	U8 U101	TLV431				SHUNT	TLV431-DBZ	TLV431BCDBZR	TI
	2	U9 U10	IPC100N04S51R9ATMA1	100A	40V		N-CHNL	POWER56	IPC100N04S51R9ATMA1	Infineon Technologies

Not Installed Components

NI	Quantity	Reference	Value	Rating	Voltage	Tolerance	Type	PCB_Footprint	ManufacturerPN	Manufacturer
NI	1	C28	2.2nF		50V	±20%	X7R	C0603	C0603X7R500-222M	Venkel
NI	1	C32	4.7nF		50V	±10%	X7R	C0603	C0603X7R500-472K	Venkel
NI	2	C34 C114	820pF		200V	±10%	C0G	C0805	C0805C0G201-821KNE	Venkel
NI	2	C35 C36	1nF		2000V	±5%	X7R	C1206	C1206C102JGRACU	Kemet
NI	1	C43	0.01uF		16V	±20%	X7R	C0603	C0603X7R160-103M	Venkel
NI	1	C44	470pF		25V	±20%	X7R	C0603	C0603X7R250-471M	Venkel
NI	1	C49	1nF		50V	±5%	C0G	C0603	C0603C0G500-102J	Venkel
NI	1	D1	SMAJ58A	400W	58V		GP	DO-214AC	SMAJ58A	Littelfuse
NI	1	D2	15V	500mW	15V	5%	Zener	SOD123	MMSZ4702T1G	On Semi
NI	2	D7 D10	PDS1040	10A	40V		Schottky	POWERDI-5	PDS1040-13	Diodes Inc.
NI	1	Q3	FCX491TA	2A	60V		NPN	SOT89-BCE	FCX491TA	Diodes Inc.
NI	2	R35 R38	6.8	1/8W		±5%	ThickFilm	R1206	CR1206-8W-6R8J	Venkel
NI	2	R39 R132	10	1/4W		±1%	ThickFilm	R1206	CR1206-4W-10R0F	Venkel
NI	1	R46	1K	1/10W		±1%	ThickFilm	R0603	CR0603-10W-1001F	Venkel
NI	1	R47	0	1A			ThickFilm	R0603 R0603L	CR0603-16W-000	Venkel
NI	1	R53	510	1/10W		±1%	ThickFilm	R0603	CR0603-10W-5100F	Venkel