

Eval Board Name	IST-A0050
Revision	5.0

CreationDate	Proto Rev	Released
12/18/2017	5.00	0

NI	Quantity	Reference	Value	Rating	Voltage	Tolerance	Type	PCB Footprint	ManufacturerPN	Manufacturer
	3	C2 C4 C5	10uF		16V	±20%	TANT	C3216	T491A106M016AT	Kemet
	2	C3 C6	0.1uF		10V	±10%	X7R	C0603 C0603L	C0603X7R100-104K	Venkel
	1	D1	598-8610-307F	20mA				LED3-1210-KKKA	598-8610-307F	Dialight
	1	D12	IP4220CZ6	±8KV	5.5V		ESD ARRAY	SOT6N2.8P0.95	IP4220CZ6	NXP Semiconductors
	2	D2 D3	White (5000K)	30mA	2.9V		SMT, ChipLED	LED-4014	MXZ7-PW50-0000	Lumileds
	2	D4 D5	White (2200K)	30mA	2.9V		SMT, ChipLED	LED-4014	MXZ8-PW22-0000	Lumileds
	2	D6 D11	GREEN	25mA				LED-0603	SML-LX0603GW	LUMEX INC
	1	D7	0.49V	1.0A	40V		Schottky	SOD-123	STPS140Z	ST Semiconductor
	1	D8	0.39V	500mA	20V		<small>Dual Schottky Common Cathode</small>	SOT23-AAK	PMEG2005CT,215	NXP Semiconductors
	1	DF1	Diffuser						KP-003-G9	Shining Bright (Chinese)
	1	F1	1.5A	1.5A	63V		Fast Acting	FUSE-466	046601.5NR	Littlefuse
	1	J2	HEADER 5X2				Header	CONN2X5-FTS CONN2X5-FTSH-K	FTS-105-01-F-DV	Samtec
	1	J3	USB-MICRO-B-RA				USB	MICRO-USB-B-RA-SMT	ZX62-B-5P	HIROSE
	1	JP1	SM HEADER 1x2				Header	CON2P2MM-S2BPHSM4TB	S2B-PH-SM4-TB(LF)(SN)	JST
	8	M1 M2 M3 M4 M5 M6 M7 M8	FDV302P	120mA	25V		P-CHNL	SOT23-GSD	FDV302P	Fairchild
	2	M9 M10	FDN5618P	1.25A	60V		P-CHNL	SOT23-GSD	FDN5618P	Fairchild
	2	P200 P201	CONN HEADER 20x2				Header	CONN2X20-TFC	TFC-120-02-L-D-A-K-TR	Samtec
	1	PCB1	IST-A0050 REV 5.0				BARE PCB	N/A	IST-A0050 REV 5.0	SiLabs
	1	PL1	Diffuser Mount				Plastic	A0050-DIFFUSER	LD-P-0050	<small>Shenzhen Tuowei Model Technology Co.,Ltd</small>
	9	Q1 Q2 Q3 Q4 Q5	FDV301N	220mA	25V		N-CHNL	SOT23-GSD	FDV301N	Fairchild
	1	R1	3.01K	1/16W		±1%	ThickFilm	R0603 R0603L	CR0603-16W-3011F	Venkel
	9	R15 R16 R17 R18	47K	1/16W		±1%	ThickFilm	R0402 R0402L	CR0402-16W-4702F	Venkel
	1	R2	0	1A			ThickFilm	R0603 R0603L	CR0603-16W-000	Venkel
	2	R25 R35	2K	1/16W		±5%	ThickFilm	R0402	CR0402-16W-202J	Venkel
	1	R27	4.7K	1/16W		±1%	ThickFilm	R0402 R0402L	CR0402-16W-4701F	Venkel
	1	R3	200	1/10W		±0.5%	±25PPM	R0603 R0603L	RT0603DRD07200RL	Yageo
	1	R30	499	1/16W		±1%	ThickFilm	R0402 R0402L	CR0402-16W-4990F	Venkel
	2	R31 R32	15	1/16W		±1%	ThickFilm	R0402 R0402L	CR0402-16W-15R0F	Venkel
	1	R4	100	1/10W		±1%	ThickFilm	R0603 R0603L	CR0603-10W-1000F	Venkel
	7	R5 R6 R10 R11 R12 R13 R14	20.0	1/10W		±1%	ThickFilm	R0603 R0603L	ERJ-3EKF20R0V	Panasonic
	2	R7 R9	39.0	1/10W		±1%	ThickFilm	R0603	ERJ-3EKF39R0V	Panasonic
	1	R8	10.0	1/10W		±1%	ThickFilm	R0603	ERJ-3EKF10R0V	Panasonic
	1	S1	SW PUSHBUTTON	50mA	12Vdc		Tactile	SW4N10P4.5	4-1437565-2	Tyco Electronics
	4	SF1 SF2 SF3 SF4	BUMPER				FOOT	RUBBER_FOOT_SMALL-0.375	SJ61A4	3M
	3	SW1 SW2 SW3	SW_SLIDE_2POS	0.2A @ 12VDC			SLIDE	SW-CL-SB-12A-1X	CL-SB-12A-12	Copal
	1	U1	TS1005		5V		OPAMP	SOT5N2.8P0.95	TS1005IG5T	SiLabs
	1	U3	MAX604					SO8N6.0P1.27	MAX604ESA	Maxim
	1	U4	MCP73831				Charger	SOT5N2.8P0.95	MCP73831-2ACI/OT	Microchip

Not Installed Components

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NI	Quantity	Reference	Value	Rating	Voltage	Tolerance	Type	PCB_Footprint	ManufacturerPN	Manufacturer
NI	2	C1 C20	0.1uF		10V	±10%	X7R	C0402 C0402L	C0402X7R100-104K	Venkel
NI	2	C11 C16	10uF		10V	±10%	X5R	C0603 C0603L	C0603X5R100-106K	Venkel
NI	4	C12 C13 C14 C15	0.1uF		16V	±20%	X7R	C0402	C0402X7R160-104M	Venkel
NI	2	C18 C19	10pF		50V	±2%	C0G	C0402 C0402L	GRM1555C1H100GA01D	MuRata
NI	1	C7	4.7uF		4V	±20%	X5R	C0402 C0402L	C1005X5R0G475M	TDK Corp
NI	2	C8 C17	1uF		10V	±10%	X5R	C0402 C0402L	GRM155R61A105KE15J	MuRata
NI	2	C9 C10	0.01uF		25V	±10%	X7R	C0402	C0402X7R250-103K	Venkel
NI	1	D10	RED	30mA				LED-0603	SML-LX0603SIW	LUMEX INC
NI	1	D13	BLUE	30mA				LED-0603	SML-LXFT0603USBC	LUMEX INC
NI	1	D9	0.31V	1A	30V		Schottky	POWERDI-123	DFLS130L-7	Diodes Inc.
NI	2	J1 J4	HEADER 5X2				Header	CONN2X5-FTS CONN2X5-FTSH-K	FTS-105-01-F-DV	Samtec
NI	1	Q10	FDV301N	220mA	25V		N-CHNL	SOT23-GSD	FDV301N	Fairchild
NI	2	R21 R23	4.7K	1/16W		±1%	ThickFilm	R0402 R0402L	CR0402-16W-4701F	Venkel
NI	1	R22	10K	1/16W		±5%	ThickFilm	R0402	CR0402-16W-103J	Venkel
NI	1	R26	332	1/16W		±1%	ThickFilm	R0402 R0402L	CR0402-16W-3320F	Venkel
NI	2	R33 R34	1K	1/16W		±1%	ThickFilm	R0402 R0402L	CR0402-16W-1001F	Venkel
NI	1	R36	1K	1/16W		±5%	ThickFilm	R0402	CR0402-16W-102J	Venkel
NI	11	TP1 TP5 TP6 TP7	WHITE				Loop	TESTPOINT	151-201-RC	Kobiconn
NI	1	U2	24AA024		1.7V		I2C	TSSOP8N6.4P0.65	24AA024-I/ST	Microchip
NI	1	U5	EFM32GG330F1024		3.3V		MCU	QFN64M9X9P0.5E7.3	EFM32GG330F1024-QFN64	SiLabs
NI	1	U6	8Mb				FLASH	USON8M3.0P0.5E0.3X1.7	MX25R8035FZUILO	Macronix
NI	1	X1	48MHz				Quartz	OSC4N2.0X1.6-AMB11	ABM11-48.000MHZ-B7G-T	Abracon LLC