



## Bill of Materials for the STK433-040NGEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
R01	1	Resistance for Ripple filter. (Fuse resistance is recommended. Ripple filter is constituted with C03, C23.)	100Ω/1W	5%	Through-hole	PANASONIC	ERG-1SJ101	Yes	Yes
R02,R03	2	Resistance for input filters.	1kΩ,1/4W	1%	Through-hole	AKAHANE ELECTRONICS	RN16S102FK	Yes	Yes
R04	0	Do Not Populate	-	-	-	-	-	Yes	Yes
R05,R06	2	Input impedance is determined.	56kΩ,1/4W	1%	Through-hole	AKAHANE ELECTRONICS	RN16S563FK	Yes	Yes
R08,R09	2	Voltage Gain(VG) is determined with R11,R12,R13	56kΩ,1/4W	1%	Through-hole	AKAHANE ELECTRONICS	RN16S563FK	Yes	Yes
R07, R10	0	Do Not Populate	-	-	-	-	-	Yes	Yes
R11,R12	2	Voltage Gain(VG) is determined with R8,R9,R10 (As for VG, it is desirable to set up by R11,R12,R13)	1.8kΩ,1/4W	1%	Through-hole	AKAHANE ELECTRONICS	RN16S182FK	Yes	Yes
R13	0	Do Not Populate	-	-	-	-	-	Yes	Yes
R14,R15	2	Resistance for oscillation prevention.	4.7Ω,1/4W	1%	Through-hole	AKAHANE ELECTRONICS	RN14S4R7FK	Yes	Yes
R16	0	Do Not Populate	-	-	-	-	-	Yes	Yes
R17,R18	2	Resistance for oscillation prevention.	4.7Ω,1W	5%	Through-hole	PANASONIC	ERX1SJ4R7	Yes	Yes
R19	0	Do Not Populate	-	-	-	-	-	Yes	Yes
R20,R21	2	This resistance is used as detection resistance of the protection circuit application.	0.22Ω,2W	5%	Through-hole	PANASONIC	ERX2SJR22	Yes	Yes
R22	0	Do Not Populate	-	-	-	-	-	Yes	Yes
R30	1	Select Restriction resistance, for the impression voltage of '#17(Stand-By)pin' must not exceed the maximum rating.	2.7kΩ,1/4W	1%	Through-hole	AKAHANE ELECTRONICS	RN16S272FK	Yes	Yes
R31	1	Standby Control Circuit Resistor	33kΩ,1/4W	1%	Through-hole	AKAHANE ELECTRONICS	RN16S333FK	Yes	Yes
R32	1	Standby Control Circuit Resistor	1kΩ,1/4W	1%	Through-hole	AKAHANE ELECTRONICS	RN16S102FK	Yes	Yes
R33	1	Standby Control Circuit Resistor	2kΩ,1/4W	1%	Through-hole	AKAHANE ELECTRONICS	RN16S202FK	Yes	Yes
R34,R35	2	Shorted wire	-	-	Through-hole	-	-	Yes	Yes
R36	0	Do Not Populate	-	-	-	-	-	Yes	Yes
C01,C02	2	Capacitor for oscillation prevention.	100μF,100V	-	Through-hole	SUN ELECTRONIC	100ME100HC	Yes	Yes
C03,C23	2	Decoupling capacitor.	100μF,100V	-	-	SUN ELECTRONIC	100ME100HC	Yes	Yes
C04,C05	2	Input coupling capacitor. (for DC current prevention.)	2.2μF,50V	-	Through-hole	SUN ELECTRONIC	50ME2R2HC	Yes	Yes
C06	0	Do Not Populate	-	-	-	-	-	Yes	Yes
C07,C08	2	Input filter capacitor.	470pF,50V	5%	Through-hole	MURATA	RPE2C1H471J2K1A01B	Yes	Yes
C09	0	Do Not Populate	-	-	-	-	-	Yes	Yes
C10,C11	2	Capacitor for oscillation prevention.	3pF,50V	5%	Through-hole	MURATA	RPE3C1H3R0C2K1B01B	Yes	Yes
C12	0	Do Not Populate	-	-	-	-	-	Yes	Yes
C13,C14	2	Negative feedback capacitor.	10μF,16V	-	Through-hole	SUN ELECTRONIC	16ME10HC	Yes	Yes
C15	0	Do Not Populate	-	-	-	-	-	Yes	Yes
C16,C17	2	Capacitor for oscillation prevention.	0.1μF,50V	5%	Through-hole	PANASONIC	ECQV1H104JL	Yes	Yes
C18	0	Do Not Populate	-	-	-	-	-	Yes	Yes
C19,C20	2	Capacitor for oscillation prevention.	100pF, 50V	5%	Through-hole	MURATA	RPE2C1H101J2K1A01B	Yes	Yes

C21	0	Do Not Populate	-	-	-	-	-	Yes	Yes
L01,L02	2	Coil for oscillation prevention.	3 $\mu$ H	-	Through-hole	KORIN ELECTRONICS	PN-8112-00	Yes	Yes
L03	0	Do Not Populate	-	-	-	-	-	Yes	Yes
Tr1	1	Standby Control Circuit Bip Transistor	V <sub>ce</sub> ≥75V, I <sub>c</sub> ≥1mA	-	Through-hole	ON SEMICONDUCTOR	2SC3332	No	Yes
D1	1	Standby Control Circuit Diode	V <sub>R</sub> ≥60V, I <sub>o</sub> ≥120mA	-	Through-hole	ON SEMICONDUCTOR	DS135AD	No	Yes
C32	1	Standby Control Circuit Capacitor	33 $\mu$ F, 10V	-	Through-hole	SUN ELECTRONIC	10ME33HC	Yes	Yes
J1,J2,J3,J4,J5,J6	8	Shorted wire	-	-	Through-hole	-	-	Yes	Yes
J7,JS2,JS3,JS4, JS5,JS7,JS8,JS9 , JS10	0	Do Not Populate	-	-	Through-hole	-	-	Yes	Yes
JS6	1	Shorted wire	-	-	Through-hole	-	-	Yes	Yes
JS1	1	Resistor	100 $\Omega$ , 1W	5%	Through-hole	PANASONIC	ERG-1SJ101	Yes	Yes
	1	Hybrid IC#1 Pin Position	-	-	Through-hole	ON SEMICONDUCTOR	STK433-040	No	Yes