



Bill of Materials for the STK581U3C2DGEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
R1	1	Fault pull-up Resistor	20kΩ/0.1W/±1%	1%	1608	KOA	RK73H1JTTD2002F	Yes	Yes
R2 - R7	6	Signal input low pass filter Resistor	100Ω/0.1W/±1%	1%	1608	KOA	RK73H1JTTD1000F	Yes	Yes
R8 - R13	6	Signal input pull-down Resistor	3.3kΩ/0.1W/±1%	1%	1608	KOA	RK73H1JTTD3301F	Yes	Yes
C1, C2	2	Aluminum Electrolytic Capacitor Plus - Minus	470uF/450V/±20%	20%	Through-hole Barrel	Nippon Chemi-Con	EKMM451VSN471MA50S	Yes	Yes
C3	1	Film Capacitor Plus - Minus, Snubber	2.2uF/630V/±5%	5%	Through-hole Barrel	PANASONIC	ECQE6225JT	Yes	Yes
C4 - C6	3	Aluminum Electrolytic Capacitor VBx - VSx	47uF/35V/±20%	20%	Through-hole Barrel	Nippon Chemi-Con	EKMG350ELL470ME11D	Yes	Yes
C7	1	Aluminum Electrolytic Capacitor VDD - VSS	220uF/35V/±20%	20%	Through-hole Barrel	Nippon Chemi-Con	EKMG350ELL221MHB5D	Yes	Yes
C8 - C11	4	VBx - VSx, VDD - VSS Capacitor	0.1uF/50V/±10%	10%	1608	MURATA	GRM188B31H104K	Yes	Yes
C12 - C17	6	Signal Input Low Pass Filter Capacitor	100pF/50V/±5%	5%	1608	MURATA	GRM1882C1H101J	Yes	Yes
CN1	1	Header - 14 Pin	-	-	14pin/2.54pitch	HIROSE ELECTRIC	A2-14PA-2.54DSA(71)	Yes	Yes
VSS, VDD, VEXT, ISO, FAULT, HIN1-3, LIN1-3, V+, V-	13	Test Pins	-	-	Recommended Through-hole Diameter (0.8 mm)	Mac8	ST-1-3	Yes	Yes
U, V, W, +, -	5	Faston Terminal (Tab) Connectors	-	-	Through-hole Tab	Various	Various	Yes	Yes
IC1	1	Inverter IPM for 3-phase Motor Drive	SIP3/1shunt	-	SIP-22	ON Semiconductor	STK581U3C2D-E	No	Yes