



## Bill of Materials for the CCR230PS3GEVK Evaluation Kit

## DRIVER BOARD

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
D1-D4	4	Power Rectifier, Standard Recovery, 1 A, 1000 V	MRA4007T3G	-	SMA	ON Semiconductor	MRA4007T3G	No	Yes
D6	1	Power Rectifier, Standard Recovery, 1 A, 400 V	MRA4004T3G	-	SMA	ON Semiconductor	MRA4004T3G	No	Yes
D5, D7	2	75 V Switching Diode	BAS16HT1G	-	SOD-323	ON Semiconductor	BAS16HT1G	No	Yes
CCR1, CCR2	2	120 VAC, 20mA - LED Driver, Constant Current Regulator	NSIC2020BT3G	15%	SMB	ON Semiconductor	NSIC2020BT3G	No	Yes
CCR3	1	120 VAC, 30mA - LED Driver, Constant Current Regulator	NSIC2030BT3G	15%	SMB	ON Semiconductor	NSIC2030BT3G	No	Yes
T1, T3	2	40V, 200mA NPN Bipolar Transistor	MMBT3904LT1G	-	SOT-23	ON Semiconductor	MMBT3904LT1G	No	Yes
T2, T4, T6, T8	4	350V, 100mA High Voltage NPN Bipolar Transistor	MMBT6517LT1G	-	SOT-23	ON Semiconductor	MMBT6517LT1G	No	Yes
T5	1	150V, 500mA High Voltage PNP Bipolar Transistor	MMBT5401LT1G	-	SOT-23	ON Semiconductor	MMBT5401LT1G	No	Yes
T7, T9, T11	3	350V, 500mA High Voltage PNP Bipolar Transistor	MMBT6520LT1G	-	SOT-23	ON Semiconductor	MMBT6520LT1G	No	Yes
T10	1	140V, 600mA High Voltage NPN Bipolar Transistor	MMBT5550LT1G	-	SOT-23	ON Semiconductor	MMBT5550LT1G	No	Yes
MOV1	1	VARISTOR, SMD, 430V	430V Varistor	-	SMD	PANASONIC	ERZVF2M431	Yes	Yes
F1	1	FUSE, ANTISURGE, SMD, 1A	1A antisurge fuse	-	SMD	LITTELFUSE	0452001.NRL	Yes	Yes
S1-S15	15	0 Ohm, THICK FILM CHIP RESISTOR	0R	-	2010	VISHAY DRALORIC	CRCW20100000Z0EF	Yes	Yes
R1, R8	2	RESISTOR, 1206, 560K, 1%	560k	1%	1206	VISHAY DRALORIC	CRCW1206560KFKEA	Yes	Yes
R2, R9	2	RESISTOR, 1206, 442K, 1%	442k	1%	1206	VISHAY DRALORIC	CRCW1206442KFKEA	Yes	Yes
R3	1	RESISTOR, THICK FILM, 250MW, 1206	6.2k	1%	1206	VISHAY DRALORIC	CRCW12066K20FKEA	Yes	Yes
R4, R5, R11, R12	4	RESISTOR, 1206, 150K, 1%	150k	1%	1206	VISHAY DRALORIC	CRCW1206150KFKEA	Yes	Yes
R6	1	RESISTOR, 1206, 30K0, 1%	30k	1%	1206	VISHAY DRALORIC	CRCW120630K0FKEA	Yes	Yes
R7, R14, R19, R21, R22	5	RESISTOR, 1206, 2K20, 1%	2.2k	1%	1206	VISHAY DRALORIC	CRCW12062K20FKEA	Yes	Yes
R10	1	RESISTOR, 1206, 2K94, 1%	2.94k	1%	1206	VISHAY DRALORIC	CRCW12062K94FKEA	Yes	Yes
R13, R18, R20	3	RESISTOR, 1206, 10K, 1%	10k	1%	1206	VISHAY DRALORIC	CRCW120610K0FKTA	Yes	Yes
R15	1	RESISTOR, 1206, 1K4, 1%	1.4k	1%	1206	VISHAY DRALORIC	CRCW12061K40FKEA	Yes	Yes
R16, R17	2	RESISTOR, 1206, 200K, 1%	200k	1%	1206	VISHAY DRALORIC	CRCW1206200KFKEA	Yes	Yes
C1	1	CAPACITOR, 1206, X7R, 630V, 2.2NF	2.2n	10%	1206	MURATA	GRM31BR72J222KW01L	Yes	Yes
C2, C3, C4	3	CAPACITOR, 0805, 1nF, 50V	1n	5%	805	YAGEO (PHYCOMP)	CC0805JRNPO9BN102	Yes	Yes

LEDCON1, LEDCON2	2	BG300-04-A-L-A - RECEPTACLE, 2.54MM, SMT, R/A, 4WAY, FEMALE	-	-	-	GLOBAL CONNECTOR TECHNOLOGY	BG300-04-A-L-A	No	Yes
ACCON1	1	CONNECTOR, LED, 2 POST SMD	-	-	-	GLOBAL CONNECTOR TECHNOLOGY	1954097-1	No	Yes
TP1, TP2, TP3, TP4, TP5	5	TEST POINT, SMT, 3.25MM	-	-	-	HARWIN	S1751-46	No	Yes

### LED BOARD

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
LED1-LED12	12	20 V High Power LEDs - White, XLamp	20V / 175 mA	-	-	CREE	MX6SWT-H1-0000-000BE8 (bin# MX6S-H1-8A3-Q3-TB-0001)	No	Yes
LEDCON1, LEDCON2	2	BG301-04-A-0540-L-B - HEADER, 2.54MM, SMT, R/A, 4WAY, MALE	-	-	-	GLOBAL CONNECTOR TECHNOLOGY	BG301-04-A-0540-L-B	No	Yes