

RAB3-Radar Rev1 BOM

Part Description	Specification	Value	Designator	Footprint	Quantity	Manufacturer	Manufacturer Part No.	Supplier	Supplier part number
Ceramic Capacitor	X5R, 6.3V, 10%	1uF	C1, C8, C27, C40	C0402	4	Samsung EM	CL05A105KQ5NNNC	Rutronik	KKK18264
Ceramic Capacitor	X5R, 6.3V, 20%	10uF	C3, C16, C29, C32	C0402	4	Samsung EM	CL05A106MQ5NUNC	Rutronik	KK52215
Feed Through Capacitor	4V, 2A, 20%	22uF	C4, C5, C7, C10, C11, C12, C13, C14, C15	NFMJMPC226R0G3D	9	muRata	NFMJMPC226R0G3D	Rutronik	NFMJMPC226R0G3D
Ceramic Capacitor	NPO, 50V, 5%	33pF	C6, C9, C17, C23, C24, C28, C30, C33, C36, C37, C41, C43, C44, C45, C48, C49, C50, C53, C54, C57, C60, C61, C62, C65, C66, C69	C0402	26	AVX	04025A330JAT2A	Rutronik	KKK13594
Ceramic Capacitor	X7R, 50V, 10%	100nF	C25, C26, C34, C35, C38, C39, C46, C47, C51, C52, C55, C56, C63, C64, C67, C68	C0402	16	Yageo	CC0402KRX7R9BB104	Rutronik	KKK23619
Ceramic Capacitor	X7R, 50V, 10%	1uF	C31	C0805	1	Yageo	CC0805KKX7R9BB105	Rutronik	KKK20733
Ceramic Capacitor	X7R, 25V, 20%	22uF	C42	C0805	1	Samsung EM	CL21A226MAYNNNE	Rutronik	KKK24951
Ceramic Capacitor	X7R, 50V, 10%	10nF	C58	C0805	1	Yageo	CC0805KRX7R9BB103	Rutronik	KKK13596
Ceramic Capacitor	X7R, 50V, 10%	100nF	C59	C0805	1	Yageo	CC0805KRX7R9BB104	Rutronik	KKK15320
TOPLED* E1608	GREEN, 20mA	KGDELLS1.22-JGKH-24-0-2-S	D1	KG_DELLS_GREEN	1	OSRAM	KGDELLS1.22-JGKH-24-0-2-S	Rutronik	LEDATV1791
TOPLED* E1608	RED, 20mA	KSDDELLS1.22-JHKI-1-0-2-S	D2	KS_DELLS_RED	1	OSRAM	KSDDELLS1.22-JHKI-1-0-2-S	Rutronik	LEDATV2344
High I <sup>2</sup> t Chip fuse	32V, 2A	CC12H2A-TR	F1	FUSE1206	1	EATON	CC12H2A-TR	Rutronik	FUSE10755
EMI Suppression LC Filter	50MHz . 20mA	NFA21SL806X1A48L	FL1, FL2	NFA21SL506X1A48L	2	muRata	NFA21SL806X1A48L	Rutronik	FE3998
Ferrite Bead	1K@100MHz, 1.5A	MPZ2012S102AT000	FL5	Inductor BKPA0020121	1	TDK Corporation	MPZ2012S102AT000	Rutronik	FE2928
Ferrite Bead	600Ohm, 0.23A	BLM15PX601SN1D	L1, L3, L4, L5, L6, L7, L8	L0402	7	muRata	BLM15PX601SN1D	Rutronik	FE4904
Clock Oscillator	80 MHz, ±50ppm	80 MHz	OSC1	OSC2016	1	Kyocera AVX	KC2016K80.0000C1GE00	Rutronik	KC2016K80.0000C1GE00
Arduino Connector	10 pos. 2,54mm	SL 20 THR 124 10 Z	P1	HDR1X10 ARDUINO	1	Fischer Elektronik	SL 20 THR 124 10 Z	Rutronik	SL 20 THR 124 10 Z
Arduino Connector	8 pos. 2,54mm	SL 20 THR 124 8 Z	P3, P5	HDR1X8 ARDUINO	2	Fischer Elektronik	SL 20 THR 124 8 Z	Rutronik	SL 20 THR 124 8 Z
Arduino Connector	6 pos. 2,54mm	SL 20 THR 124 6 Z	P4	HDR1X6 ARDUINO	1	Fischer Elektronik	SL 20 THR 124 6 Z	Rutronik	SL 20 THR 124 6 Z
N-Channel MOSFET	20V, 0.63A	DMG1012T-7	Q1, Q3, Q5	SOT-523 custom	3	Diodes Inc.	DMG1012T-7	Rutronik	TMOS56623
P-Channel MOSFET	-20V, -0.6A	PJE8403_R1_00001	Q2, Q4	SOT-523 custom	2	PANJIT	PJE8403_R1_00001	Rutronik	TMOS2833
Thick Film Resistor	5% 0,063W	220R	R1, R2	R0402	2	Yageo	RC0402JR-13220RL	Rutronik	WRC54705
Thick Film Resistor	5% 0,063W	150R	R3	R0402	1	Yageo	RC0402JR-07150RL	Rutronik	WRC33815
Thick Film Resistor	1% 0,063W	49.9K	R4, R5, R6, R7, R8, R9, R10	R0402	7	Yageo	RC0402FR-0749K9L	Rutronik	WRC34049
Thick Film Resistor	5% 0,063W	0R	SB1, SB2, SB3, SB4, SB5, SB6, SB9, SB10, SB11, SB12, SB13, SB14, SB15, SB16, SB17	SB_0402	15	Yageo	RC0402JR-070RL	Rutronik	WRC34031
60 GHz Radar Sensor	57GHz ~ 64GHz, 3.3V	BGT60TR13CE6327XUMA1	U1	PG-VF2BGA-40-1	1	Infineon Technologies	BGT60TR13CE6327XUMA1	Rutronik	BGT60TR13CE6327XUMA1
60GHz Smart Sensor Micro-Module	57GHz ~ 64GHz, 5.5V	NJR4652F2S1	U2	NJR4652	1	NISSHINBO	NJR4652F2S1	Rutronik	NJR4652F2S1
Single Bit Voltage Level Translator	5.5V, 1.65V	74LVC1T45F24-7	U3, U5, U6, U8, U9, U10, U11, U12	X2-DFN1410-6	8	Diodes Inc.	74LVC1T45F24-7	Rutronik	ICLOG10841
250mA High PSRR Low Noise LDO with Enable	5.5V, 1.8V, 250mA	AP7353-18FS4-7	U4	X2-DFN1010-4	1	Diodes Inc.	AP7353-18FS4-7	Rutronik	AP7353-18FS4-7
150mA Ultra-Low Quiescent Current LDO with Enable	5.5V, 3.3V, 150mA	AP7354-33FS4-7	U7, U13	X2-DFN1010-4	2	Diodes Inc.	AP7354-33FS4-7	Rutronik	ICSPR10461