

RAB4-RTK 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, C2, C7, C39	C0402	4	Samsung EM	CL05A105KQ5NNNC	Rutronik	KKK18264
Ceramic Capacitor	NP0, 50V, 5%	33pF	C3, C4, C5, C6, C9, C10, C11, C12, C22, C27, C30, C31, C43, C44, C47, C48, C49, C50, C51, C52, C54, C55, C57, C58, C59, C60, C67, C68, C69, C70, C75, C76, C77, C78, C83, C84, C85, C86	C0402	38	AVX	04025A330JAT2A	Rutronik	KKK13594
Ceramic Capacitor	X7R, 25V, 10%	4.7nF	C8	C0402	1	KEMET	C0402C472K3RAC7867	Rutronik	KKK26721
Ceramic Capacitor	X7R, 50V, 10%	100nF	C13, C16, C18, C23, C24, C28, C32, C36, C38, C40, C45, C46, C53, C56, C63, C64, C65, C66, C71, C72, C73, C74, C79, C80, C81, C82, C87, C88, C89, C90	C0402	30	Yageo	CC0402KRX7R9BB104	Rutronik	KKK23619
Niobium Oxide Capacitor	6.3V, 20%	47uF	C14	Case-B	1	AVX	NOJB476M006RWJ	Rutronik	KTA6684
Ceramic Capacitor	X5R, 6.3V, 10%	22uF	C15, C29, C33, C35, C37, C41, C62	C0805	7	Samsung EM	CL21A226KQQNNNG	Rutronik	KKS2632
Ceramic Capacitor	NP0, 50V, 5%	100pF	C17, C19, C21, C25, C42	C0402	5	Yageo	CC0402JRNPO9BN101	Rutronik	KKK12260
Polymer Electrolytic Capacitor	6.3V 20%	220uF	C26	Case-B	1	KEMET	T520B227M006ATE070	Rutronik	KTA8521
Ceramic Capacitor	X7R, 50V, 5%	330pF	C34	C0402	1	Yageo	CC0402KRX7R9BB331	Rutronik	KKK15237
Tantalum Capacitor	6.3V 20%	1000uFx6.3V	C61	7361-38	1	AVX	TPSV108M006R0040	Rutronik	KTA6307
Nano SIM Connector	Push-Push	SF72S006VBDR2500	CON1	JAE_SF72S006VBDR2500	1	JAE	SF72S006VBDR2500	Rutronik	CONN9427
TVS Diode	5V, 0.225kW	DFLT5V0A-7	D1	PowerDI123	1	Diodes Inc.	DFLT5V0A-7	Rutronik	DTRL9639
TOPLED® E1608	GREEN, 20mA	KGDELLS1.22-JGKH-24-0-2-S	D2, D6, D7	KG_DELLS_GREEN	3	OSRAM	KGDELLS1.22-JGKH-24-0-2-S	Rutronik	LEDATV1791
Small signal Schottky diode	30V, 0.2A	BAT54WT-7	D3, D4	SOD-523	2	Diodes Inc.	BAT54WT-7	Rutronik	DSKY5741
ESD Diode	0.25pF, 14V	PESD0402-140	D5, D8	PESD0402	2	Littelfuse	PESD0402-140	Rutronik	DTRL11783
High Pwr Chip fuse	32V, 2A	CC12H2A-TR	F1, F2	FUSE1206	2	EATON	CC12H2A-TR	Rutronik	FUSE10755
Inductor	5%, 180mA	68nH	L1, L2	L0402	2	MuRata	LQG15HN68NJ02D	Rutronik	JND10329
Ferrite Bead	120R, 2A	BLM18PG121SH1D	L3	L0603	1	muRata	BLM18PG121SH1D	Rutronik	FE3867
M3 Pan Head Machine Screw	M3, 6mm	P/N29341	NS1, NS2, NS3, NS4	29311	4	Keystone Electronics	P/N 29341	Rutronik	BAT4868
Arduino Connector	10 pos. 2.54mm	RS1-A5-10-G-SGM-.394-HT	P1	HDR1X10_ARDUINO	1	Adam Tech	RS1-A5-10-G-SGM-.394-HT	Rutronik	RS1-A5-10-G-SGM-.394-HT
USB-C 2.0 Waterproof Connector	5A, 30V	P/N 2130830005	P2	MOLEX_2130830005	1	molex	P/N 2130830005	Rutronik	CONN4956
Arduino Connector	8 pos. 2.54mm	RS1-A5-08-G-SGM-.394-HT	P3, P5	HDR1X8_ARDUINO	2	Adam Tech	RS1-A5-08-G-SGM-.394-HT	Rutronik	RS1-A5-08-G-SGM-.394-HT
Arduino Connector	6 pos. 2.54mm	RS1-A5-06-G-SGM-.394-HT	P4	HDR1X6_ARDUINO	1	Adam Tech	RS1-A5-06-G-SGM-.394-HT	Rutronik	RS1-A5-06-G-SGM-.394-HT
SMA Connector	Female	73391-0083	P6, P7, P8, P9	73391-0083	4	molex	73391-0083	Rutronik	73391-0083
N-Channel MOSFET	20V, 0.63A	DMG1012T-7	Q1, Q2, Q3, Q4, Q5, Q6, Q7	SOT-523_custom	7	Diodes Inc.	DMG1012T-7	Rutronik	TMOSS6623
Thick Film Resistor	5% 0,063W	1K	R1, R11, R21	R0402	3	Yageo	RC0402JR-071KL	Rutronik	WRC33833
Thick Film Resistor	5% 0,063W	5.1K	R2, R3	R0402	2	ASJ	CR10-512-JK	Rutronik	WRC54946
Thick Film Resistor	5% 0,063W	10K	R4, R6, R8, R9, R10, R36, R37	R0402	7	ASJ	CR10-103-JK	Rutronik	WRC40976
Thick Film Resistor	5% 0,063W	1M	R5	R0402	1	ASJ	CR10-105-JK	Rutronik	WRC35254
Thick Film Resistor	1% 0,063W	75K	R12	R0402	1	ASJ	CR10-7502-FK	Rutronik	WRC50183
Thick Film Resistor	1% 0,063W	49.9K	R13, R15, R18, R19, R23	R0402	5	Yageo	RC0402FR-0749K9L	Rutronik	WRC34049
Thick Film Resistor	1% 0,063W	150K	R14	R0402	1	Yageo	RC0402FR-07150KL	Rutronik	WRC34764
Thick Film Resistor	1% 0,063W	20K	R16	R0402	1	ASJ	CR10-2002-FN	Rutronik	WRC53526
Thick Film Resistor	1% 0,063W	470K	R17	R0402	1	Yageo	RC0402FR-07470KL	Rutronik	WRC34703
Thick Film Resistor	5% 0,063W	0R	R26, R27, R30, R33	R0402	4	Yageo	RC0402JR-070RL	Rutronik	WRC34031
Low Capacitance Multilayer Varistor	18V, 4A, 15mJ	USB0002DP	RV1	USB0002	1	AVX	USB0002DP	Rutronik	WVDR3535
EVQPUC02K	2.2N, Right Angle	EVQPUA02K	S1, S2	EVQPUA	2	Panasonic	EVQPUA02K	Rutronik	EVQPUA02K
Thick Film Resistor	5% 0,063W	0R	SB1, SB2, SB4, SB5, SB6, SB7, SB8, SB9, SB10, SB11, SB12, SB13, SB14, SB15, SB16, SB17, SB18, SB19, SB20, SB21, SB24, SB25	SB_0402	22	Yageo	RC0402JR-070RL	Rutronik	WRC34031
5mm Hex Female Standoff	M3, 15mm	P/N25512	SO1, SO2, SO3, SO4	24475	4	Keystone Electronics	P/N 25512	Rutronik	BAT6084
VERTICAL MOUNT SMT - J BEND	6V DC, 0.3A	JS202011JCQN	SW1	JS202011JCQN	1	C&K	JS202011JCQN	Rutronik	SWITCH10809
SMT Test Point	3.81*2.03	P/N5019	TP1	5019_keystone	1	Keystone Electronics	P/N5019	Rutronik	BAT4950
LTE C1 THREADX GNSS with 2G/3G fallback	LTE C1, 2G, 3G	LE910C1WX03T037100	U1	XCVR_LE910C1WX03T0371	1	Telit Cinterion	LE910C1WX03T037100	Rutronik	GSM2137
RTK GNSS All-constellation Multi-frequency	3.3V, 180mA	UM980	U2	UM980	1	UNICORE COMMUNICATIONS	UM980	Rutronik	GPS1468
2.0A Inductor Built-in Step-Down DC/DC Converter	6V, 2A	MYRGM080200X41RA	U3	MYRGM080200	1	MuRata	MYRGM080200X41RA	Rutronik	MYRGM080200X41RA
Inductor Built-in Step-Down "mini DC/DC" Converter	6V, 600mA	MYRGP080060W21RF	U4	MYRGP080060	1	MuRata	MYRGP080060W21RF	Rutronik	MYRGP080060W21RF
Load Switch IC with Over current limited function	1.54A, 5.5V	TCK1024G,LF	U5	WCSP6E	1	TOSHIBA	TCK1024G,LF	Rutronik	TCK1024G,LF
Single Bit Voltage Level Translator	5.5V, 1.65V	74LVC1T45FZ4-7	U6, U8, U9, U10, U11, U12, U13, U14, U15	X2-DFN1410-6	9	Diodes Inc.	74LVC1T45FZ4-7	Rutronik	ICLOG10841
150mA Ultra-Low Quiescent Current LDO with Enable	3.3V, 150mA	AP7354-33FS4-7	U7	X2-DFN1010-4	1	Diodes Inc.	AP7354-33FS4-7	Rutronik	ICSPR10461
Cellular 4G LTE/3G/2G Magnetic Mount Antenna					1	2J	2J6924Ma-075D302-C899GRST	Rutronik	2J6924Ma-075D302-C899GRST
GPS/GNSS/SBAS/RTK/L1/L2 Antenna					1	2J	2J7C01MC2F-075LL100-C20NBST	Rutronik	2J7C01MC2F-075LL100-C20NBST
GPS/GLONASS/BeiDou/QZSS/Galileo/IRNSS/L1/L5 Antenna					1	2J	2J7C01MC3F-075LL100-C20NBST	Rutronik	2J7C01MC3F-075LL100-C20NBST