

Evaluation Kit for RA2A2 (EK-RA2A2)
RTK7EKA2A2S00001BJ Board PartsList

LLWEB-20154655 Rev 1.2

No.	Reference	Description	Specification	Parts Number	Manufacturer	Qty	Note
1	C1,C2,C3,C5,C25,C51,C56,C57,C61,C67,C72,C77,C78,C79,C80	Multilayer Ceramic Capacitors	0.1u	CC0402KRX7R8BB104	Yageo	15	
2	C7	Multilayer Ceramic Capacitors	0.1u(DNF)	CC0402KRX7R8BB104	Yageo	1	Unmounted
3	C4,C69,C70,C76	Multilayer Ceramic Capacitors	4.7u	C2012X7R1C475K125AE	TDK	4	
4	C6,C64,C65	Multilayer Ceramic Capacitors	10u	EMK212BB7106MG-T	YUDEN	3	
5	C8,C9,C10	Multilayer Ceramic Capacitors	0.47u	CC0603KRX7R8BB474	Yageo	3	
6	C21,C24	Multilayer Ceramic Capacitors	15p	CC0402JRNPO9BN150	Yageo	2	
7	C22,C23	Multilayer Ceramic Capacitors	22p	CC0402JPNPO9BN220	Yageo	2	
8	C60,C66,C68	Multilayer Ceramic Capacitors	1u	CC0603KRX7R7BB105	Yageo	3	
9	C62	Multilayer Ceramic Capacitors	47p	CC0402JRNPO9BN470	Yageo	1	
10	C73,C74	Multilayer Ceramic Capacitors	10p	CC0402JRNPO9BN100	Yageo	2	
11	C75	Multilayer Ceramic Capacitors	0.22u	CC0402KRX7R7BB224	Yageo	1	
12	D1,D2	Schottky Diodes	RB160MM-40TR	RB160MM-40TR	Rohm	2	
13	D3	ESD Suppressors / TVS Diodes	RCLAMP0582N(DNF)	RCLAMP0582N	Semtech Corporation	0	Unmounted
14	D4	ESD Suppressors / TVS Diodes	UCLAMP0571P(DNF)	UCLAMP0571P	Semtech Corporation	0	Unmounted
15	E2,E3,E4,E9,E10,E12,E13,E16,E20,E21,E22,E23,E26,E27,E28,E29,E30,E31,E32,E72,E73,E74,Ex1,Ex2	Printed Wiring	Jumper_Trace_Cut	Jumper_Trace_Cut		0	Unmounted
16	E1,E5,E6,E7,E8,E11,E17,E18,E19,EX3,EX4	Printed Wiring	Jumper_Solder_Bridge	Jumper_Solder_Bridge		0	Unmounted
17	J1	Headers & Wire Housings	61304021121	61304021121	Würth Elektronik	1	
18	J2,J3,J4	Headers & Wire Housings	61302021121	61302021121	Würth Elektronik	3	
19	J5	J-Link 6-pin Needle Adapter	needle_adapter_6pin(DNF)	needle_adapter_6pin		0	Unmounted
20	J6,J9,J16	Connector Header Through Hole 2 position 0.079" (2.00mm)	NRPN021PAEN-RC	NRPN021PAEN-RC	Sullins Connector Solutions	3	
21	J8	Connector Header Through Hole 3 position 0.079" (2.00mm)	NRPN031PAEN-RC	NRPN031PAEN-RC	Sullins Connector Solutions	1	
22	J10	CONN RCPT USB2.0 MICRO B SMD R/A	ZX62D-B-5PA8(30)	ZX62D-B-5PA8(30)	Hirose Electric	1	
23	J13	CONN HEADER SMD 10POS 1.27MM	FTSH-105-01-L-DV-007-K	FTSH-105-01-L-DV-007-K	Samtec	1	
24	J18,J23	WR-PHD 2.54 MM SOCKET HEADER; 8	61300811821	61300811821	Würth Elektronik	2	
25	J19	WR-PHD 2.54 MM SOCKET HEADER 6 P	61300611821	61300611821	Würth Elektronik	1	
26	J20	CONN HEADER SMD 20POS 1.27MM	FTSH-110-01-L-DV-007-K	FTSH-110-01-L-DV-007-K	Samtec Inc.	1	
27	J21,J22	CONN RCPT 8POS 0.1 GOLD PCB	5-535541-6	5-535541-6	TE Connectivity	2	
28	J24	CONN HDR 10POS 0.1 GOLD PCB	61301011821	61301011821	Würth Elektronik	1	
29	J25,J26	CONN RCPT 12POS 0.1 TIN PCB R/A	SSW-106-02-T-D-RA	SSW-106-02-T-D-RA	Samtec	2	
30	J27,J28	GROVE 2MM 4PIN R/A CONN	110990037	110990037	Seeed Studio	2	
31	J29	CONN HEADER VERT 8POS 2MM	NRPN042PAEN-RC	NRPN042PAEN-RC	Sullins Connector Solutions	1	
32	J30	CONN HEADER SMD R/A 4POS 1MM	SM04B-SRSS-TB(LF)(SN)	SM04B-SRSS-TB(LF)(SN)	J.S.T. MFG	1	
33	LED1	Standard LEDs (Blue)	150060BS75000	150060BS75000	Würth Elektronik	1	
34	LED2	Standard LEDs (Green)	150060GS75000	150060GS75000	Würth Elektronik	1	
35	LED3	Standard LEDs (Red)	150060RS75000	150060RS75000	Würth Elektronik	1	
36	LED4	Standard LEDs (White)	LTW-C-191TS5	LTW-C-191TS5	Lite-On	1	
37	LED5	Standard LEDs (Yellow)	150060YS75000	150060YS75000	Würth Elektronik	1	

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38	MP1,MP2,MP3,MP4,MP5,MP6	Rubber Foot	BS25BL07X30RP	BS25BL07X30RP	Bumper Specialties Inc.	6	9.8mm (D), 5mm (H), clear color
39	R1,R2,R11,R37,R41	Thick Film Resistors	1.5k	RC0402FR-071K5L	Yageo	5	
40	R3	Current Sense Resistors	0.005	WSP08055L000FEA18	Vishay	1	
41	R9,R12,R28,R31,R33,R34,R36,R39,R40,R45,R81,R87	Thick Film Resistors	10k	RC0402FR-0710KL	Yageo	12	
42	R24	Thick Film Resistors	1k	RC0402FR-071KL	Yageo	1	
43	R27	Thick Film Resistors	464	RC0402FR-07464RL	Yageo	1	
44	R29	Thick Film Resistors	2.61k	RC0402FR-072K61L	Yageo	1	
45	R32,R38	Thick Film Resistors	4.7k	RC0402FR-074K7L	Yageo	2	
46	R77,R78,R80,R114,R117	Thick Film Resistors	150	RK73H1ETTP1500F	KOA	5	
47	R82	Thick Film Resistors	15k	RK73H1ETTP1502F	KOA	1	
48	R83,R113	Thick Film Resistors	30k	RC0402FR-0730KL	Yageo	2	
49	R85,R86	Thick Film Resistors	27	ERJH2RF27R0X	Panasonic	2	
50	S1,S2	Tactile Switches	PTS645SM43SMTR92LFS	PTS645SM43SMTR92LFS	C&K	2	
51	S3	Tactile Switches	PTS645SK43SMTR92LFS	PTS645SK43SMTR92LFS	C&K	1	
52	TP1,TP3,TP7	PC TEST POINT MINIATURE	+5V TEST POINT	36-5019CT-ND	Keystone Electronics	3	
53	TP5,TP6	Through Hole	TP_HOLE_1P00_0P50	TP_HOLE_1P00_0P50		0	Unmounted
54	TP8,TP9	PC TEST POINT MINIATURE	GROUND TEST POINT	36-5019CT-ND	Keystone Electronics	2	
55	TP10	PC TEST POINT MINIATURE	+3.3V TEST POINT	36-5019CT-ND	Keystone Electronics	1	
56	TP11,TP12	fiducial_heyfra	fiducial_heyfra	fiducial_heyfra		0	Unmounted
57	U1	MCU	R7FA2A2AD3CFP	R7FA2A2AD3CFP	Renesas	1	
58	U7	Debug MCU	R7FA4M2AD3CFL	R7FA4M2AD3CFL	Renesas	1	
59	U8	LDO Voltage Regulators	ISL80102IRAJZ	ISL80102IRAJZ	Renesas	1	
60	Y1	Crystals CRYSTAL 20.0000MHZ 10PF	ABM8-20.000MHZ-10-B1U-T	ABM8-20.000MHZ-10-B1U-T	Abracon	1	
61	Y2	Crystals 32.768kHz 12.5pF	SC20S-12.5PF20PPM	SC20S-12.5PF20PPM	Seiko Instruments	1	
62	Y3	Crystals 12MHz ESR 130 10pF	ECS-120-10-36B-CWY-TR	ECS-120-10-36B-CWY-TR	ECS	1	
63	J6,J8,J29	CONN SHUNT 2MM OPEN TOP 2PS GOLD	0.079" (2.00mm) Pitch	SPN02SYBN-RC	Sullins Connector Solutions	6	J6: 1-2 pin, J8: 1-2 pin, J29: 1-2, 3-4, 5-6,7-8 pin
64	TPMCU	WR-PHD 2.54mm 2Pin T HT Header	61300211121(DNF)	61300211121	Würth Elektronik	0	Unmounted