

## 6. DRS4 Evaluation Board V3 Bill of Materials

Count	ComponentName	RefDes	Value	Description
1	24LC128_SN	U38		EEPROM 16k x 8
1	25LC1024SM	U26		EEPROM
1	AD8061ART	U22		Amplifier
3	AD8605ART	U18		Amplifier
	AD8605ART	U19		Amplifier
	AD8605ART	U20		Amplifier
1	AD9245	U21		ADC
4	ADCMP601	U13		Comparator
	ADCMP601	U14		Comparator
	ADCMP601	U15		Comparator
	ADCMP601	U16		Comparator
4	ADG901	U1		Wideband SPST Switches
	ADG901	U3		Wideband SPST Switches
	ADG901	U7		Wideband SPST Switches
	ADG901	U9		Wideband SPST Switches
1	ADR03	U24	2.5V	Ref.
4	BAV99	U28		Diode
	BAV99	U30		Diode
	BAV99	U32		Diode
	BAV99	U34		Diode
1	CAPP	C138	220u	Tantal, >=10V
4	CAP_0402	C51	10n	Capacitor >=10V
	CAP_0402	C52	10n	Capacitor >=10V
	CAP_0402	C55	10n	Capacitor >=10V
	CAP_0402	C56	10n	Capacitor >=10V
15	CAP_0402	C7	100n	Capacitor >=10V
	CAP_0402	C8	100n	Capacitor >=10V
	CAP_0402	C15	100n	Capacitor >=10V
	CAP_0402	C16	100n	Capacitor >=10V
	CAP_0402	C21	100n	Capacitor >=10V
	CAP_0402	C22	100n	Capacitor >=10V
	CAP_0402	C31	100n	Capacitor >=10V
	CAP_0402	C32	100n	Capacitor >=10V
	CAP_0402	C39	100n	Capacitor >=10V
	CAP_0402	C40	100n	Capacitor >=10V
	CAP_0402	C45	100n	Capacitor >=10V
	CAP_0402	C46	100n	Capacitor >=10V
	CAP_0402	C49	100n	Capacitor >=10V
	CAP_0402	C50	100n	Capacitor >=10V
	CAP_0402	C53	100n	Capacitor >=10V
5	CAP_0402	C58	100p	Capacitor >=10V
	CAP_0402	C59	100p	Capacitor >=10V
	CAP_0402	C60	100p	Capacitor >=10V
	CAP_0402	C62	100p	Capacitor >=10V
	CAP_0402	C63	100p	Capacitor >=10V
24	CAP_0402	C1	220n	Capacitor >=10V
	CAP_0402	C3	220n	Capacitor >=10V
	CAP_0402	C4	220n	Capacitor >=10V
	CAP_0402	C6	220n	Capacitor >=10V
	CAP_0402	C9	220n	Capacitor >=10V
	CAP_0402	C10	220n	Capacitor >=10V
	CAP_0402	C13	220n	Capacitor >=10V

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	CAP_0402	C14	220n	Capacitor	>=10V
	CAP_0402	C25	220n	Capacitor	>=10V
	CAP_0402	C27	220n	Capacitor	>=10V
	CAP_0402	C28	220n	Capacitor	>=10V
	CAP_0402	C30	220n	Capacitor	>=10V
	CAP_0402	C33	220n	Capacitor	>=10V
	CAP_0402	C34	220n	Capacitor	>=10V
	CAP_0402	C37	220n	Capacitor	>=10V
	CAP_0402	C38	220n	Capacitor	>=10V
7	CAP_0603	C11	1u	Capacitor	>=10V
	CAP_0603	C12	1u	Capacitor	>=10V
	CAP_0603	C35	1u	Capacitor	>=10V
	CAP_0603	C36	1u	Capacitor	>=10V
	CAP_0603	C76	1u	Capacitor	>=10V
	CAP_0603	C77	1u	Capacitor	>=10V
	CAP_0603	C104	1u	Capacitor	>=10V
1	CAP_0603	C75	4.7n	Capacitor	>=10V
1	CAP_0603	C74	5.6n	Capacitor	>=10V
6	CAP_0603	C23	10n	Capacitor	>=10V
	CAP_0603	C24	10n	Capacitor	>=10V
	CAP_0603	C47	10n	Capacitor	>=10V
	CAP_0603	C48	10n	Capacitor	>=10V
	CAP_0603	C144	10n	Capacitor	>=10V
	CAP_0603	C153	10n	Capacitor	>=10V
2	CAP_0603	C133	12p	Capacitor	>=10V
	CAP_0603	C134	12p	Capacitor	>=10V
1	CAP_0603	C135	15p	Capacitor	>=10V
2	CAP_0603	C91	56p	Capacitor	>=10V
	CAP_0603	C94	56p	Capacitor	>=10V
51	CAP_0603	C54	100n	Capacitor	>=10V
	CAP_0603	C65	100n	Capacitor	>=10V
	CAP_0603	C66	100n	Capacitor	>=10V
	CAP_0603	C67	100n	Capacitor	>=10V
	CAP_0603	C69	100n	Capacitor	>=10V
	CAP_0603	C70	100n	Capacitor	>=10V
	CAP_0603	C71	100n	Capacitor	>=10V
	CAP_0603	C73	100n	Capacitor	>=10V
	CAP_0603	C78	100n	Capacitor	>=10V
	CAP_0603	C82	100n	Capacitor	>=10V
	CAP_0603	C83	100n	Capacitor	>=10V
	CAP_0603	C84	100n	Capacitor	>=10V
	CAP_0603	C85	100n	Capacitor	>=10V
	CAP_0603	C87	100n	Capacitor	>=10V
	CAP_0603	C89	100n	Capacitor	>=10V
	CAP_0603	C90	100n	Capacitor	>=10V
	CAP_0603	C92	100n	Capacitor	>=10V
	CAP_0603	C95	100n	Capacitor	>=10V
	CAP_0603	C96	100n	Capacitor	>=10V
	CAP_0603	C98	100n	Capacitor	>=10V
	CAP_0603	C100	100n	Capacitor	>=10V
	CAP_0603	C102	100n	Capacitor	>=10V
	CAP_0603	C103	100n	Capacitor	>=10V
	CAP_0603	C105	100n	Capacitor	>=10V
	CAP_0603	C106	100n	Capacitor	>=10V
	CAP_0603	C107	100n	Capacitor	>=10V
	CAP_0603	C108	100n	Capacitor	>=10V
	CAP_0603	C109	100n	Capacitor	>=10V
	CAP_0603	C110	100n	Capacitor	>=10V

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	CAP_0603	C111	100n	Capacitor	>=10V
	CAP_0603	C112	100n	Capacitor	>=10V
	CAP_0603	C113	100n	Capacitor	>=10V
	CAP_0603	C114	100n	Capacitor	>=10V
	CAP_0603	C115	100n	Capacitor	>=10V
	CAP_0603	C116	100n	Capacitor	>=10V
	CAP_0603	C117	100n	Capacitor	>=10V
	CAP_0603	C118	100n	Capacitor	>=10V
	CAP_0603	C119	100n	Capacitor	>=10V
	CAP_0603	C120	100n	Capacitor	>=10V
	CAP_0603	C121	100n	Capacitor	>=10V
	CAP_0603	C124	100n	Capacitor	>=10V
	CAP_0603	C125	100n	Capacitor	>=10V
	CAP_0603	C126	100n	Capacitor	>=10V
	CAP_0603	C127	100n	Capacitor	>=10V
	CAP_0603	C128	100n	Capacitor	>=10V
	CAP_0603	C129	100n	Capacitor	>=10V
	CAP_0603	C130	100n	Capacitor	>=10V
	CAP_0603	C132	100n	Capacitor	>=10V
	CAP_0603	C137	100n	Capacitor	>=10V
	CAP_0603	C147	100n	Capacitor	>=10V
	CAP_0603	C150	100n	Capacitor	>=10V
1	CAP_0603	C143	100p	Capacitor	>=10V
14	CAP_0805	C79	4.7u	Capacitor	>=10V
	CAP_0805	C86	4.7u	Capacitor	>=10V
	CAP_0805	C93	4.7u	Capacitor	>=10V
	CAP_0805	C99	4.7u	Capacitor	>=10V
	CAP_0805	C101	4.7u	Capacitor	>=10V
	CAP_0805	C140	4.7u	Capacitor	>=10V
	CAP_0805	C145	4.7u	Capacitor	>=10V
	CAP_0805	C146	4.7u	Capacitor	>=10V
	CAP_0805	C148	4.7u	Capacitor	>=10V
	CAP_0805	C149	4.7u	Capacitor	>=10V
	CAP_0805	C151	4.7u	Capacitor	>=10V
	CAP_0805	C152	4.7u	Capacitor	>=10V
	CAP_0805	C154	4.7u	Capacitor	>=10V
	CAP_0805	C156	4.7u	Capacitor	>=10V
16	CAP_1206	C17	10u	Capacitor	>=10V
	CAP_1206	C18	10u	Capacitor	>=10V
	CAP_1206	C41	10u	Capacitor	>=10V
	CAP_1206	C42	10u	Capacitor	>=10V
	CAP_1206	C64	10u	Capacitor	>=10V
	CAP_1206	C68	10u	Capacitor	>=10V
	CAP_1206	C72	10u	Capacitor	>=10V
	CAP_1206	C80	10u	Capacitor	>=10V
	CAP_1206	C81	10u	Capacitor	>=10V
	CAP_1206	C88	10u	Capacitor	>=10V
	CAP_1206	C97	10u	Capacitor	>=10V
	CAP_1206	C122	10u	Capacitor	>=10V
	CAP_1206	C123	10u	Capacitor	>=10V
	CAP_1206	C136	10u	Capacitor	>=10V
	CAP_1206	C141	10u	Capacitor	>=10V
	CAP_1206	C155	10u	Capacitor	>=10V
1	CAP_1206	C139	22u	Capacitor	>=10V
1	CAP_1206	C131	100n	Capacitor	>=10V
1	CAP_1210	C142	47u	Capacitor	>=10V
2	CAP_1210	C57	100u	Capacitor	>=10V
	CAP_1210	C61	100u	Capacitor	>=10V

1	CONN_MOLEX_JTAG_FPGA	J45	JTAG	
1	CY7C68013-56	U37		Microcontroller
1	DRS4_76	U17		DRS4
8	IND_0603	L1		
	IND_0603	L2		
	IND_0603	L3	220nH	Inductor
	IND_0603	L4	220nH	Inductor
	IND_0603	L5	220nH	Inductor
	IND_0603	L6	220nH	Inductor
	IND_0603	L7	220nH	Inductor
	IND_0603	L8	220nH	Inductor
1	IND_1008	L11	10u	Inductor
2	IND_1812	L9	10u	Inductor
	IND_1812	L10	10u	Inductor
2	JMP2MM	JP1	~WP	Jumper
	JMP2MM	JP2	~WP	Jumper
1	LED_PLCC-4	U39		HSMN-A400-S8PM2
1	LED_PLCC-4	U40	green	HSMM-A400-U4QM2
1	LED_PLCC-4	U41	yellow	HSMA-A401-U45M1
1	LMZ10503	U43		Power Module 3A
1	LP2985-2.5	U45		150mA Low Dropout
1	LP2985-3.3	U44		150mA Low Dropout
1	LTC2600	U23		DAC
1	MAX6662	U25		Temp. Sensor
4	MMCX-90	J18		
	MMCX-90	J30		
	MMCX-90	J39		
	MMCX-90	J41		
1	QUARZ_NKS7	Q1	24MHz	24MHz, MQ/30/30/40/12pf
4	RCLAMP0502B	U5		ESD Protection
	RCLAMP0502B	U6		ESD Protection
	RCLAMP0502B	U11		ESD Protection
	RCLAMP0502B	U12		ESD Protection
1	REG1117-1.2	U47		REG 1117A Low Dropout
19	RES_0402	R1	0E	Resistor
	RES_0402	R3	0E	Resistor
	RES_0402	R37	0E	Resistor
	RES_0402	R38	0E	Resistor
	RES_0402	R41	0E	Resistor
	RES_0402	R43	0E	Resistor
	RES_0402	R77	0E	Resistor
	RES_0402	R78	0E	Resistor
	RES_0402	R99	0E	Resistor
	RES_0402	R100	0E	Resistor
	RES_0402	R101	0E	Resistor
	RES_0402	R102	0E	Resistor
	RES_0402	R103	0E	Resistor
	RES_0402	R104	0E	Resistor
	RES_0402	R105	0E	Resistor
	RES_0402	R106	0E	Resistor
	RES_0402	R146	0E	Resistor
	RES_0402	R147	0E	Resistor
	RES_0402	R148	0E	Resistor
8	RES_0402	R11	15E	Resistor
	RES_0402	R12	15E	Resistor
	RES_0402	R19	15E	Resistor
	RES_0402	R20	15E	Resistor
	RES_0402	R51	15E	Resistor

	RES_0402	R52	15E	Resistor
	RES_0402	R59	15E	Resistor
	RES_0402	R60	15E	Resistor
16	RES_0402	R29	22E	Resistor
	RES_0402	R30	22E	Resistor
	RES_0402	R31	22E	Resistor
	RES_0402	R32	22E	Resistor
	RES_0402	R33	22E	Resistor
	RES_0402	R34	22E	Resistor
	RES_0402	R35	22E	Resistor
	RES_0402	R36	22E	Resistor
	RES_0402	R69	22E	Resistor
	RES_0402	R70	22E	Resistor
	RES_0402	R71	22E	Resistor
	RES_0402	R72	22E	Resistor
	RES_0402	R73	22E	Resistor
	RES_0402	R74	22E	Resistor
	RES_0402	R75	22E	Resistor
	RES_0402	R76	22E	Resistor
4	RES_0402	R5	49.9E	Resistor
	RES_0402	R8	49.9E	Resistor
	RES_0402	R45	49.9E	Resistor
	RES_0402	R48	49.9E	Resistor
8	RES_0402	R7	61.9E	Resistor
	RES_0402	R10	61.9E	Resistor
	RES_0402	R24	61.9E	Resistor
	RES_0402	R28	61.9E	Resistor
	RES_0402	R47	61.9E	Resistor
	RES_0402	R50	61.9E	Resistor
	RES_0402	R64	61.9E	Resistor
	RES_0402	R68	61.9E	Resistor
8	RES_0402	R6	64.9E	Resistor
	RES_0402	R9	64.9E	Resistor
	RES_0402	R23	64.9E	Resistor
	RES_0402	R27	64.9E	Resistor
	RES_0402	R46	64.9E	Resistor
	RES_0402	R49	64.9E	Resistor
	RES_0402	R63	64.9E	Resistor
	RES_0402	R67	64.9E	Resistor
8	RES_0402	R13	169E	Resistor
	RES_0402	R14	169E	Resistor
	RES_0402	R16	169E	Resistor
	RES_0402	R18	169E	Resistor
	RES_0402	R53	169E	Resistor
	RES_0402	R54	169E	Resistor
	RES_0402	R56	169E	Resistor
	RES_0402	R58	169E	Resistor
8	RES_0402	R2	348E	Resistor
	RES_0402	R4	348E	Resistor
	RES_0402	R39	348E	Resistor
	RES_0402	R40	348E	Resistor
	RES_0402	R42	348E	Resistor
	RES_0402	R44	348E	Resistor
	RES_0402	R79	348E	Resistor
	RES_0402	R80	348E	Resistor
3	RES_0402	R83	390k	Resistor
	RES_0402	R84	390k	Resistor
	RES_0402	R86	390k	Resistor

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13	RES_0603	R81	0E	Resistor
	RES_0603	R82	0E	Resistor
	RES_0603	R85	0E	Resistor
	RES_0603	R91	0E	Resistor
	RES_0603	R118	0E	Resistor
	RES_0603	R119	0E	Resistor
	RES_0603	R123	0E	Resistor
	RES_0603	R124	0E	Resistor
	RES_0603	R127	0E	Resistor
	RES_0603	R128	0E	Resistor
	RES_0603	R131	0E	Resistor
	RES_0603	R132	0E	Resistor
	RES_0603	R149	0E	Resistor
6	RES_0603	R94	1k	Resistor
	RES_0603	R95	1k	Resistor
	RES_0603	R97	1k	Resistor
	RES_0603	R117	1k	Resistor
	RES_0603	R143	1k	Resistor
	RES_0603	R155	1k	Resistor
4	RES_0603	R15	1.5E	Resistor
	RES_0603	R17	1.5E	Resistor
	RES_0603	R55	1.5E	Resistor
	RES_0603	R57	1.5E	Resistor
1	RES_0603	R114	2k4	Resistor
2	RES_0603	R139	2.2k	Resistor
	RES_0603	R140	2.2k	Resistor
8	RES_0603	R21	3.6k	Resistor
	RES_0603	R22	3.6k	Resistor
	RES_0603	R25	3.6k	Resistor
	RES_0603	R26	3.6k	Resistor
	RES_0603	R61	3.6k	Resistor
	RES_0603	R62	3.6k	Resistor
	RES_0603	R65	3.6k	Resistor
	RES_0603	R66	3.6k	Resistor
3	RES_0603	R151	4k7	Resistor
	RES_0603	R152	4k7	Resistor
	RES_0603	R153	4k7	Resistor
1	RES_0603	R142	4k7	Resistor
4	RES_0603	R108	4.7E	Resistor
	RES_0603	R109	4.7E	Resistor
	RES_0603	R111	4.7E	Resistor
	RES_0603	R115	4.7E	Resistor
1	RES_0603	R116	10E	Resistor
3	RES_0603	R120	10k	Resistor
	RES_0603	R133	10k	Resistor
	RES_0603	R150	10k	Resistor
2	RES_0603	R110	22E	Resistor
	RES_0603	R112	22E	Resistor
1	RES_0603	R156	23.7k	Resistor
1	RES_0603	R141	49.9E	Resistor
1	RES_0603	R154	75k	Resistor
3	RES_0603	R90	100E	Resistor
	RES_0603	R98	100E	Resistor
	RES_0603	R113	100E	Resistor
2	RES_0603	R137	100k	Resistor
	RES_0603	R138	100k	Resistor
1	RES_0603	R92	130E	Resistor
2	RES_0603	R144	220E	Resistor

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	RES_0603	R145	220E	Resistor
1	RES_0603	R87	390k	Resistor
2	RES_0805	R88	0E	Resistor
	RES_0805	R89	0E	Resistor
3	RES_0805	R93	0E	Resistor
	RES_0805	R107	0E	Resistor
	RES_0805	R136	0E	Resistor
1	RES_0805	R96	1k	Resistor
8	RES_1206	R121	51E	Resistor
	RES_1206	R122	51E	Resistor
	RES_1206	R125	51E	Resistor
	RES_1206	R126	51E	Resistor
	RES_1206	R129	51E	Resistor
	RES_1206	R130	51E	Resistor
	RES_1206	R134	51E	Resistor
	RES_1206	R135	51E	Resistor
1	RES_1206	R157	120E	Resistor
4	SMA_SMD_S	J1		SMA Connector
	SMA_SMD_S	J2		SMA Connector
	SMA_SMD_S	J4		SMA Connector
	SMA_SMD_S	J5		SMA Connector
4	SN74LVC1T45DB	U27	Transceiver	Bus Transceiver
	SN74LVC1T45DB	U29	Transceiver	Bus Transceiver
	SN74LVC1T45DB	U31	Transceiver	Bus Transceiver
	SN74LVC1T45DB	U33	Transceiver	Bus Transceiver
4	THS4508	U2		Amplifier
	THS4508	U4		Amplifier
	THS4508	U8		Amplifier
	THS4508	U10		Amplifier
1	TPS79625	U46		Low Dropout
1	USB_CONN_B	U35		
1	VX3	Q2	66MHz	Oszillator VX3, 3.3V
1	XC3S400-TQ144	U36		FPGA
1	XCF02S-V020	U42		EEPROM