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# Bill of Material (BoM)

Here you can find the recent Bill of Materials for OVI40-SDR.

## UI-PCB:

**Please pay attention! This BOM is a preliminary and might change during betatest phase.**

E.g.the SD-Cardreader which is listed here will be replaced in series because it is no longer available.

BOM OVI40-SDR UI V1.7		24-09-2017	DF80E	Distributor / Prices								
Part	Value	Description	Package	Amount	FARNELL	Price	Reichelt	Price	Mouser	Price	Digikey	Price
IC1 /IC12	WM8731	Audio CODEC WM8731	SSOP28	2					238-WM8731SEDS/V		WM8731SEDS/RVCT-ND	3,63
		or Audio CODEC TLV320AIC23BPWG4	SSOP28	2	120-7297	9,25						
IC2	LM4952TS	TI Stereo Audio PA	LM4952	1	100-8028	3,72			926-LM4952TS/NOPB		LM4952TS/NOPB-ND	3,06
IC3	LP5907_Q1	TI low noise LDO 3,3 Volt	SOT23-5	1	249-2304	0,654			595-LP5907QMF3-3.3Q1		296-38557-1-ND	0,47
IC4	STM32F76X_ZIT6	MCU	LQFP144	1	253-5499	12,84			511-STM32F767ZIT6		497-16521-ND	13,26
IC5	ASTX-H11	16 MHz TCXO 2,5ppm 3,2 x 2,5 mm	TCXO_32X25	1					815-ASTXH1116T		535-12044-1-ND	2,84
IC6	KA78RM33R	3,3 Volt LDO	DPAK	1	245-1041	0,681	TS 2940 CP33		821-TS2940CP33			
IC7	AT24CM02	I2C EEPROM	S008	1			24LC1026_ISN		579-24LC1026I/SN		AT24CM02-SSHM-B-ND	1,89
IC8	NCP5501DT50G	5,0 Volt LDO	DPAK	1	170-3369	0,602	TS 2940 CP50		863-NCP5501DT50G			
Q1	32,768 kHz	QCM-315_SMD	CM315	1					695-CM315D-32.7KEZFT		300-8813-1-ND	0,6
T3	BC857	PNP Transistor	SOT23	1	179-8067	0,02	BC 857C SMD	0,034	771-BC857CW115			
D5	BAV70	Double Diode	SOT23	2	267-7467	0,031	BAV 70 SMD	0,034	512-BAV70			
D6	BAV70	Double Diode	SOT23	.								
D7	BAS85	Schottky barrier diode	SOD80C	3	146-9394	0,23	BAS 85 SMD	0,034	771-BAS85135			
D8	BAS85	Schottky barrier diode	SOD80C	.								
D9	BAS85	Schottky barrier diode	SOD80C	.								
D1	green	LED	LED_3MM	1	276-4976	0,409	LED 3MM ST GN		710-151034GS03000			
D2	red	LED	LED_3MM	1	276-4977	0,361	LED 3MM ST RT		710-151034RS03000			
D3	blue	LED	LED_3MM	1	276-4975	0,443	LED 3MM ST BL		710-151034BS03000			
BAT1-HOLDER		Battery Holder CR2032		1	188-5903	2,98					BU2032-1-ND	0,66
BAT1	CR2032P_L	Lithium Battery 3,0Volt	CR_2032_H	1			CR 2032P-H					
X1	PN87520-S	USB Plug HOST	PN87520-S	1	117-7883	0,81	USB AW	0,2				
J11	MINI-USB_B	USB Plug DFU	MINI-USB_B	1	211-2367	0,561	USB BWM SMD	0,28				
LCD1	HY32D	3,2 Zoll LCD ILI9325	HY32D_UHSDR_MOD1	1								
L1	47uH	L_SMD1005	L1005	3	221-5655	0,13			810-MLZ2012M470WT000		MLZ2012M470WT000	0,12
L2	47uH	L_SMD1005	L1005	.								
L3	47uH	L_SMD1005	L1005	.								
R1	47k	SMD Resistor TK50	0805	6			SMD-0805 47k	0,02	667-ERJ-U06F4702V			
R1A	100R	SMD Resistor TK50	0603	13			SMD-0603 100	0,03	667-ERJ-3RBD1000V			
R1B	0R	SMD Resistor TK50	0603	3			SMD-0603 0	0,03	667-ERJ-3GEY0R00V			
R2	1k	SMD Resistor TK50	0603	7			SMD-0603 1,0k	0,03	667-ERJ-S03F1001V			
R3	100R	SMD Resistor TK50	0603	.								
R4	1k	SMD Resistor TK50	0603	.								
R4B1	2R2	SMD Resistor TK50	1206	4			SMD ¼W 2,2	0,03	71-CRCW12062R20FNEB			
R4D	2R2	SMD Resistor TK50	1206	.								
R5	0R	SMD Resistor TK50	0603	.								
R6	1k	SMD Resistor TK50	0603	.								
R7	1k	SMD Resistor TK50	0603	.								
R8	100R	SMD Resistor TK50	0603	.								
R9	4k7	SMD Resistor TK50	0805	4			SMD-0805 4,7k	0,02	667-ERJ-S06F4701V			
R10	4k7	SMD Resistor TK50	0603	1			SMD-0603 4,7k	0,02	667-ERJ-3EKF4701V			
R11	4k7	SMD Resistor TK50	0805	.								
R12	4k7	SMD Resistor TK50	0805	.								

Last update:  
07.02.2018  
06:07

en:projekte:ovi40-sdr:bom <https://amateurfunk-sulingen.de/wiki/doku.php?id=en:projekte:ovi40-sdr:bom&rev=1517983630>

R13	47R	SMD Resistor TK50	0603	7		SMD-0603 47	0,03	667-ERJ-3EKF47R0V		
R14	47R	SMD Resistor TK50	0603	.						
R15	1k	SMD Resistor TK50	0603	.						
R16	100R	SMD Resistor TK50	0603	.						
R17	100R	SMD Resistor TK50	0603	.						
R18	100R	SMD Resistor TK50	0603	.						
R19	100R	SMD Resistor TK50	0603	.						
R20	100R	SMD Resistor TK50	0603	.						
R21	47R	SMD Resistor TK50	0603	.						
R22	47R	SMD Resistor TK50	0603	.						
R23	0R	SMD Resistor TK50	0805	8		SMD-0805 0	0,02	667-ERJ-U060R00V		
R24	680R	SMD Resistor TK50	0805	4		SMD-0805 680	0,02	ERJ-6ENF6800V		
R25	4k7	SMD Resistor TK50	0805	.						
R26	100R	SMD Resistor TK50	0603	.						
R27	100R	SMD Resistor TK50	0603	.						
R28	100R	SMD Resistor TK50	0603	.						
R29	1k	SMD Resistor TK50	0603	.						
R30	0R	SMD Resistor TK50	0805	.						
R31	0R	SMD Resistor TK50	0805	.						
R32	0R	SMD Resistor TK50	0805	.						
R33	100R	SMD Resistor TK50	0603	.						
R34	100R	SMD Resistor TK50	0603	.						
R35A	4R7	SMD Resistor TK50	1206	1		SMD ¼W 4,7	0,03	71-CRCW12064R70FNEB		
R36	680R	SMD Resistor TK50	0805	.						
R37	680R	SMD Resistor TK50	0805	.						
R40	1k	SMD Resistor TK50	0603	.						
R41	47R	SMD Resistor TK50	0603	.						
R45	2R2	SMD Resistor TK50	1206	.						
R46	2R2	SMD Resistor TK50	1206	.						
R47	47R	SMD Resistor TK50	0603	.						
R48	47R	SMD Resistor TK50	0603	.						
R101	0R	SMD Resistor TK50	0603	.						
R108	0R	SMD Resistor TK50	0805	.						
R110	0R	SMD Resistor TK50	0805	.						
R112	0R	SMD Resistor TK50	0805	.						
R114	0R	SMD Resistor TK50	0805	.						
R116	680R	SMD Resistor TK50	0805	.						
R120	47k	SMD Resistor TK50	0805	.						
R121	47k	SMD Resistor TK50	0805	.						
R122	47k	SMD Resistor TK50	0805	.						
R123	47k	SMD Resistor TK50	0805	.						
R124	47k	SMD Resistor TK50	0805	.						
C1	1nF	SMD Chip Capacitor NP0/COG	0603	10		KEM C0G0603 1,0N	0,01			
C1A	1nF	SMD Chip Capacitor NP0/COG	0603	.						
C1B	1nF	SMD Chip Capacitor NP0/COG	0603	.						
C1C	1nF	SMD Chip Capacitor NP0/COG	0603	.						
C1D	1nF	SMD Chip Capacitor NP0/COG	0603	.						
C2	1nF	SMD Chip Capacitor NP0/COG	0603	.						
C3	1nF	SMD Chip Capacitor NP0/COG	0603	.						
C4	1nF	SMD Chip Capacitor NP0/COG	0603	.						
C5	220uF	SMD Tantal-ELKO 10V	TA-C	5		TAJ 6032 220/10	0,46			
C6	220uF	SMD Tantal-ELKO 10V	TA-C	.						
C7	470nF	SMD Chip Capacitor NP0/COG	0603	4		NPO 0603 CD 470N	0,04			
C8	470nF	SMD Chip Capacitor NP0/COG	0603	.						
C9	220uF	SMD Alu-Elko 16V low ESR	E_SMD_0608	6		VF 220/16 P- D8	0,3			
C10	100nF	SMD Chip Capacitor X7R	0603	63		X7R 0603FCF 100N	0,04			
C11	100nF	SMD Chip Capacitor X7R	0603	.						
C12	10uF	SMD Tantal-ELKO 16V	TA-B 3,5 x 2,8	9		T494B 10U 16	0,51			
C13	10uF	SMD Tantal-ELKO 16V	TA-B 3,5 x 2,8	.						
C14	100nF	SMD Chip Capacitor X7R	0603	.						
C15	100nF	SMD Chip Capacitor X7R	0603	.						
C16	10uF	SMD Tantal-ELKO 16V	TA-B 3,5 x 2,8	.						
C17	10uF	SMD Tantal-ELKO 16V	TA-B 3,5 x 2,8	.						
C18	1uF	SMD Chip Capacitor NP0/COG	0603	8		NPO 0603 CE 1,0U	0,04			
C19	1uF	SMD Chip Capacitor NP0/COG	0603	.						
C20	470nF	SMD Chip Capacitor NP0/COG	0603	.						





S1	G3	SMD Pushbutton KSC941J		18	243-5157	0,64		611-KSC941JLFS		CKN10433CT-ND	0,55
S2	G2	SMD Pushbutton KSC941J		.							
S3	M2	SMD Pushbutton KSC941J		.							
S4	BM	SMD Pushbutton KSC941J		.							
S5	G4	SMD Pushbutton KSC941J		.							
S6	M3	SMD Pushbutton KSC941J		.							
S7	SM	SMD Pushbutton KSC941J		.							
S8	SP	SMD Pushbutton KSC941J		.							
S9	M1	SMD Pushbutton KSC941J		.							
S10	F3	SMD Pushbutton KSC941J		.							
S11	F1	SMD Pushbutton KSC941J		.							
S12	F2	SMD Pushbutton KSC941J		.							
S13	F4	SMD Pushbutton KSC941J		.							
S14	BP	SMD Pushbutton KSC941J		.							
S15	F5	SMD Pushbutton KSC941J		.							
S16	G1	SMD Pushbutton KSC941J		.							
S17	Power	SMD Pushbutton KSC941J		.							
S18	not assigned yet	SMD Pushbutton KSC941J		.							
J1	1503_07	Audio Plug 3,5mm	1503_07	3	121-7016	2,26	LUM 1503-07	0,59			
J2	1503_07	Audio Plug 3,5mm	1503_07	.							
J3	1503_07	Audio Plug 3,5mm	1503_07	.							
J4	1503_09	Audio Plug w. 2 switches	1503_09	1	124-3244	2,04	LUM 1503-09	0,99			
E1	EC12E_SW	Alps Encoder with push function	ALPS_EC12E_SW	4	152-0813	1,86	STEC12E08	2,1			
E2	EC12E_SW	Alps Encoder with push function	ALPS_EC12E_SW	.							
E3	EC12E_SW	Alps Encoder with push function	ALPS_EC12E_SW	.							
E4	EC12E_SW	Alps Encoder with push function	ALPS_EC12E_SW	.							
	Button Cap	Cap grey	BTNKSC920	4						CKN10429-ND	0,27
	Button Cap	Cap red	BTNKSC940	2						CKN10428-ND	0,27
	Button Cap	Cap black	BTNKSC990	2						CKN10426-ND	0,27
	Button Cap	Cap white	BTNKSC980	10						CKN10427-ND	0,27
JP1	30 Pin Board to Board	Pinheader-1x30	1x30	1			3x 40-polig				
JP2	25 Pin Board to Board	Pinheader-1x25	1x25	1							
JP3	6 Pin Board to Board	Pinheader-1x06	1x06	4							
P1	SW_12V	Pinheader-1x02	1x02	6							
P2	Speaker left	Pinheader-1x02	1x02	.							
P7	Speaker right	Pinheader-1x02	1x02	.							
P6	DFU mode Jumper	Pinheader-1x02	1x02	.							
JP8	DEBUG	Pinheader-1x06	1x06	.							
JP17	short S17	Pinheader-1x02	1x02	.							
JP5	ext. USB Host	Pinheader-1x04	1x04	2							
JP6	ext. USB DFU	Pinheader-1x04	1x04	.							
JP4	ext. Audio	Pinheader-1x06	1x06	.							
JP7	ext. Audio	Pinheader-1x06	1x06	.							
P3	alternative Bridge Vbat	Pinheader-1x02	1x02	.							
LCD1		Pinheader-2x17	2x17	1							
LCD/PCB		Holeheader low profile 2x17	BL 2X17G 2,54	1							
BU2	MOLEX_SD_49225-0821	MICROSD_Cardreader	Molex 503182-1853	1	176-4375	1,99				HR1942CT-ND	2,05
	optional parts										
D4	SS16SMA	Vishay General Semiconductor SS16	DIODE_SMA								
IC9	CY15B104Q	SPI FRAM	S008					727-CY15B104Q-SXI			
IC11	SST25VF04B	SPI FLASH 2,7V, 4Mbit	S008				SST 25VF040B	0,97	579-25VF040B504IS2AE	SST25VF040B-50-4I-SAF-N	0,82

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Last update: **07.02.2018 06:07**



