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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	DF8OE			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-LP5907QMFX-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	SO08	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_MOD	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	.								

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	.								

C21	1nF	SMD Chip Capacitor NP0/COG	0603	.								
C22	10uF	SMD Tantal-ELKO 16V	TA-B 3,5 x 2,8	.								
C23	100nF	SMD Chip Capacitor X7R	0603	.								
C24	4.7uF	SMD Tantal-ELKO	TA-A 3,2 x 1,6	1			T491A 4,7U 16	0,04				
C25	100nF	SMD Chip Capacitor X7R	0603	.								
C26	100nF	SMD Chip Capacitor X7R	0603	.								
C27	220pF	SMD Chip Capacitor NP0/COG	0805	2			NPO 0805 BG 220P	0,04				
C28	220pF	SMD Chip Capacitor NP0/COG	0805	.								
C29	100nF	SMD Chip Capacitor X7R	0603	.								
C30	100nF	SMD Chip Capacitor X7R	0603	.								
C31	100nF	SMD Chip Capacitor X7R	0603	.								
C32	220uF	SMD Alu-Elko 16V low ESR	E_SMD_0608	.								
C32B	220uF	SMD Alu-Elko 16V low ESR	E_SMD_0608	.								
C33	220uF	SMD Alu-Elko 16V low ESR	E_SMD_0608	.								
C34	100nF	SMD Chip Capacitor X7R	0603	.								
C35	220uF	SMD Alu-Elko 16V low ESR	E_SMD_0608	.								
C36	1nF	SMD Chip Capacitor NP0/COG	0805	10			NPO G0805 1,0N	0,04				
C37	1nF	SMD Chip Capacitor NP0/COG	0805	.								
C38	1nF	SMD Chip Capacitor NP0/COG	0603	.								
C39	220uF	SMD Tantal-ELKO 10V	TA-C	.								
C40	470nF	SMD Chip Capacitor NP0/COG	0603	.								
C41	10uF	SMD Tantal-ELKO 16V	TA-B 3,5 x 2,8	.								
C42	100nF	SMD Chip Capacitor X7R	0603	.								
C43	100nF	SMD Chip Capacitor X7R	0603	.								
C44	100nF	SMD Chip Capacitor X7R	0603	.								
C45	100nF	SMD Chip Capacitor X7R	0603	.								
C46	100nF	SMD Chip Capacitor X7R	0603	.								
C47	100nF	SMD Chip Capacitor X7R	0603	.								
C48	100nF	SMD Chip Capacitor X7R	0603	.								
C49	100nF	SMD Chip Capacitor X7R	0603	.								
C50	100nF	SMD Chip Capacitor X7R	0603	.								
C51	100nF	SMD Chip Capacitor X7R	0603	.								
C52	100nF	SMD Chip Capacitor X7R	0603	.								
C53	100nF	SMD Chip Capacitor X7R	0603	.								
C54	100nF	SMD Chip Capacitor X7R	0603	.								
C55	100nF	SMD Chip Capacitor X7R	0603	.								
C56	100nF	SMD Chip Capacitor X7R	0603	.								
C57	100nF	SMD Chip Capacitor X7R	0603	.								
C58	100nF	SMD Chip Capacitor X7R	0603	.								
C59	100nF	SMD Chip Capacitor X7R	0603	.								
C60	100nF	SMD Chip Capacitor X7R	0603	.								
C61	100nF	SMD Chip Capacitor X7R	0603	.								
C62	100nF	SMD Chip Capacitor X7R	0603	.								
C63	100nF	SMD Chip Capacitor X7R	0603	.								
C64	100nF	SMD Chip Capacitor X7R	0603	.								
C65	100nF	SMD Chip Capacitor X7R	0603	.								
C66	100nF	SMD Chip Capacitor X7R	0603	.								
C67	1nF	SMD Chip Capacitor NP0/COG	0805	.								
C68	1nF	SMD Chip Capacitor NP0/COG	0805	.								

C69	1nF	SMD Chip Capacitor NP0/COG	0805	.								
C70	1nF	SMD Chip Capacitor NP0/COG	0805	.								
C71	1nF	SMD Chip Capacitor NP0/COG	0805	.								
C72	1nF	SMD Chip Capacitor NP0/COG	0805	.								
C73	1nF	SMD Chip Capacitor NP0/COG	0805	.								
C74	1nF	SMD Chip Capacitor NP0/COG	0805	.								
C74A	220uF	SMD Tantal-ELKO 10V	TA-C	.								
C75	100nF	SMD Chip Capacitor X7R	0603	.								
C76	100nF	SMD Chip Capacitor X7R	0603	.								
C77	100nF	SMD Chip Capacitor X7R	0603	.								
C78	100nF	SMD Chip Capacitor X7R	0603	.								
C79	100nF	SMD Chip Capacitor X7R	0603	.								
C80	100nF	SMD Chip Capacitor X7R	0603	.								
C81	1uF	SMD Chip Capacitor NP0/COG	0603	.								
C82	1uF	SMD Chip Capacitor NP0/COG	0603	.								
C83	1uF	SMD Chip Capacitor NP0/COG	0603	.								
C84	100nF	SMD Chip Capacitor X7R	0603	.								
C85	100nF	SMD Chip Capacitor X7R	0603	.								
C86	100nF	SMD Chip Capacitor X7R	0603	.								
C87	100nF	SMD Chip Capacitor X7R	0603	.								
C88	100nF	SMD Chip Capacitor X7R	0603	.								
C89	100nF	SMD Chip Capacitor X7R	0603	.								
C90	100nF	SMD Chip Capacitor X7R	0603	.								
C91	2,2uF	SMD Chip Capacitor NP0/COG	0603	2			NPO 0603 CC 2,2U	0,04				
C92	2,2uF	SMD Chip Capacitor NP0/COG	0603	.								
C93	100nF	SMD Chip Capacitor X7R	0603	.								
C94	100nF	SMD Chip Capacitor X7R	0603	.								
C95	100nF	SMD Chip Capacitor X7R	0603	.								
C96	220uF	SMD Alu-Elko 16V low ESR	E_SMD_0608	.								
C97	10uF	SMD Tantal-ELKO 16V	TA-B 3,5 x 2,8	.								
C98	10uF	SMD Tantal-ELKO 16V	TA-B 3,5 x 2,8	.								
C99	100nF	SMD Chip Capacitor X7R	0603	.								
C101	100nF	SMD Chip Capacitor X7R	0603	.								
C102	100nF	SMD Chip Capacitor X7R	0603	.								
C104	1uF	SMD Chip Capacitor NP0/COG	0603	.								
C105	100nF	SMD Chip Capacitor X7R	0603	.								
C106	100nF	SMD Chip Capacitor X7R	0603	.								
C107	1uF	SMD Chip Capacitor NP0/COG	0603	.								
C108	1uF	SMD Chip Capacitor NP0/COG	0603	.								
C109	220pF	SMD Chip Capacitor NP0/COG	0603	1			NPO 0603AAF 220P	0,04				
C111	10uF	SMD Tantal-ELKO 16V	TA-B 3,5 x 2,8	.								
C112	100nF	SMD Chip Capacitor X7R	0603	.								
C120	220uF	SMD Tantal-ELKO 10V	TA-C	.								
C121	100nF	SMD Chip Capacitor X7R	0603	.								
C122	100nF	SMD Chip Capacitor X7R	0603	.								
C123	100nF	SMD Chip Capacitor X7R	0603	.								
C124	8,2pF – 10pF	SMD Chip Capacitor	0603	2			NPO-G0603 10P	0,04				
C125	8,2pF – 10pF	SMD Chip Capacitor	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-1×30	1×30	1			3x 40-polig					
JP2	25 Pin Board to Board	Pinheader-1×25	1×25	1								
JP3	6 Pin Board to Board	Pinheader-1×06	1×06	4								
P1	SW_12V	Pinheader-1×02	1×02	6								
P2	Speaker left	Pinheader-1×02	1×02	.								
P7	Speaker right	Pinheader-1×02	1×02	.								
P6	DFU mode Jumper	Pinheader-1×02	1×02	.								
JP8	DEBUG	Pinheader-1×06	1×06	.								
JP17	short S17	Pinheader-1×02	1×02	.								
JP5	ext. USB Host	Pinheader-1×04	1×04	2								
JP6	ext. USB DFU	Pinheader-1×04	1×04	.								
JP4	ext. Audio	Pinheader-1×06	1×06	.								
JP7	ext. Audio	Pinheader-1×06	1×06	.								
P3	alternative Bridge Vbat	Pinheader-1×02	1×02	.								
LCD1		Pinheader-2×17	2×17	1								
LCD/PCB		Holeheader low profile 2×17	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	SO08						727-CY15B104Q-SXI			
IC11	SST25VF04B	SPI FLASH 2,7V, 4Mbit	SO08				SST 25VF040B	0,97	579-25VF040B504IS2AE		SST25VF040B-50-4I-SAF-N	0,82

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