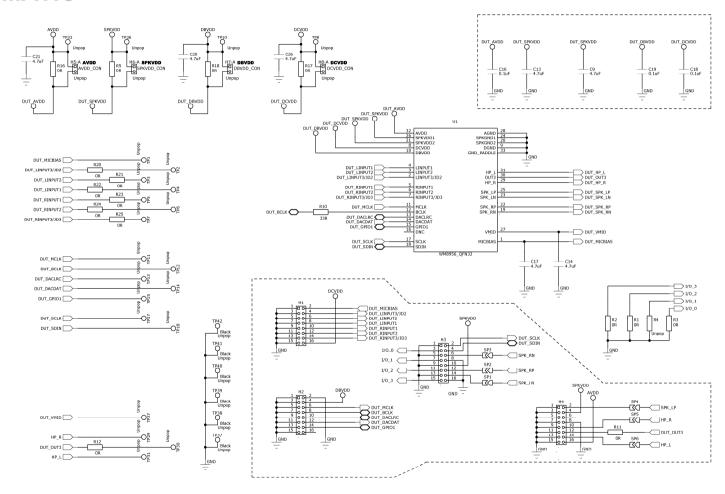


DOC TYPE:	SCHEMATIC AND LAYOUT
BOARD REFERENCE:	WM8956-6158-FL32-M
BOARD TYPE:	Customer Mini
WOLFSON DEVICE(S):	WM8956
DATE:	March 2009
DOC REVISION:	Rev 1.1



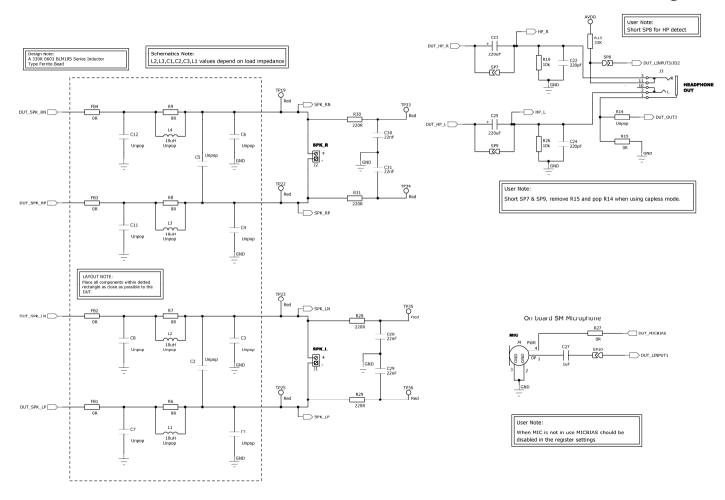
#### **SCHEMATIC**

Sheet 1: WM8956





#### Sheet 2: Analogue Outputs





**Sheet 3: Reference Tables** 

	Short	Open	1
H5-B	AVDD to DUT	No AVDD to DUT	1
PCB Ref:	AVDD_CON		No Fit
			_
	Short	Open	1
н6-в	SPKVDD to DUT	No SPKVDD to DUT	1
PCB Ref:	SPKVDD CON	•	No Fit
	Short	Open	
H7-B	DBVDD to DUT	No DBVDD to DUT	
PCB Ref:	DBVDD_CON	•	No Fit
			_
	Short	Open	1
н8-в	DCVDD to DUT	No DCVDD to DUT	1
PCB Ref:	DCVDD CON		No Fit

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#### **BILL OF MATERIALS (BOM)**

Item	RefDes	Description	Manufacturer	Manufacturer's Part Number	
1	J3	3.5mm Jack Socket 6.5mm Centre Height	Technik Industrial	TSH-3565-PBT-TIC-T	
2	J4	Silicon Surface Mount Microphone, Unamplified	Knowles Acoustics	SPM0102NE3-2	
3	C9 C13 C14 C17 C20 C21 C26	4.7uF 0603 SMD Ceramic Capacitor 6.3V X5R	Murata	GRM188R60J475KE19D	
4	MISC2	Lead-free label, 15mm round	Brady	805794	
5	J1 J2	PCB mount 1X2 terminal block for 2.5mm wire guage	LUMBERG	KRM 02	
6	C16 C18 C19	0.1uF 0603 SMD Ceramic Capacitor 16V X7R	Phycomp	06032R104K7B2	
7	C22 C24	220pF 0603 SMD Ceramic Capacitor 50V NPO	AVX	06035A221JAT2A	
8	TP19 TP22 TP23 TP25 TP33 TP34 TP35 TP36	1.32mm PCB Test Terminal RED	Vero	20-313141	
9	C28 C29 C30 C31	22nF 1206 SMD Ceramic Capacitor 50V COG	Murata	GRM3195C1H223JA01D	
10	R19 R26	10k 0603 SMD chip resistor 1% 0.063W	Multicomp	MC 0.063W 0603 1% 10K	
11	R13	33k 0603 SMD chip resistor 1% 0.063W	Multicomp	MC 0.063W 0603 1% 33K	
12	R10	33R 0603 SMD chip resistor 1% 0.063W	Multicomp	MC 0.063W 0603 1% 33R	
13	FB1 FB2 FB3 FB4	0R 0603 SMD chip resistor 1% 0.063W	Multicomp	MC 0.063W 0603 0R	
14	R1 R2 R3 R5 R6 R7 R8 R9 R11 R12 R15 R16 R17 R18 R20 R21 R22 R23 R24 R25 R27	0R 0603 SMD chip resistor 1% 0.063W	Multicomp	MC 0.063W 0603 0R	
15	R28 R29 R30 R31	220R 1206 SMD chip resistor 1% 0.125W	Multicomp	MC 0.125W 1206 1% 220R	
16	C27	1uF 0805 SMD Ceramic Capacitor 10V X7R	Multicomp	N0805R105KCT	
17	H1 H2 H3 H4	2x8 2.54mm pitch PCB Socket Strip VERTICAL	SAMTEC	SSQ-108-02-G-D	
18	C23 C25	220uF 4V SMD Tantalum Capacitor case P	Vishay	298D227X0004P2T	
19	PCB1	PCB	Kelan Circuits Ltd	WM8956-6158-FL32-M-REV1	
20	U1	Wolfson WM8956 Hi-Fi DAC 32 pin QFN	Wolfson Microelectronics	WM8956GEFL	

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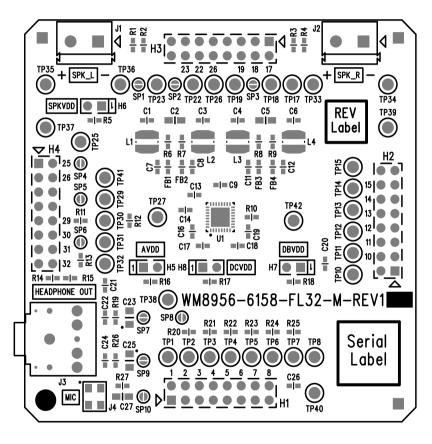


Item	RefDes	Description	Manufacturer	Manufacturer's Part Number					
Unpop	Unpop								
21	L1 L2 L3 L4	10uH Shielded SM Power 1.1A Inductor ' LPS4018 series'	Coilcraft	LPS4018-103ML					
22	H5 H6 H7 H8	1x2 PCB Pin Header 0.1" VERTICAL	Harwin	M20-9990245					
23	C2 C5	680nF 0805 SMD Ceramic Capacitor 50V X7R	KEMET	C0805C684K5RAC					
24	C1 C3 C4 C6	220pF 0603 SMD Ceramic Capacitor 50V NPO	AVX	06035A221JAT2A					
25	C7 C8 C11 C12	22pF 0603 SMD Ceramic Capacitor 50V NPO	Phycomp	2238 867 15229					
26	TP37 TP38 TP39 TP40 TP41 TP42	1.32mm PCB Test Terminal BLACK	VERO	20-2136					
27	R4 R14	0R 0603 SMD chip resistor 1% 0.063W	Multicomp	MC 0.063W 0603 0R					
28	SP1 SP2 SP3 SP4 SP5 SP6 SP7 SP8 SP9 SP10	Surface mount shorting point	N/A	N/A					
29	TP1 TP2 TP3 TP4 TP5 TP6 TP7 TP8 TP10 TP11 TP12 TP13 TP14 TP15 TP17 TP18 TP26 TP27 TP29 TP30 TP31 TP32	1.32mm off-board connection point	N/A	N/A					

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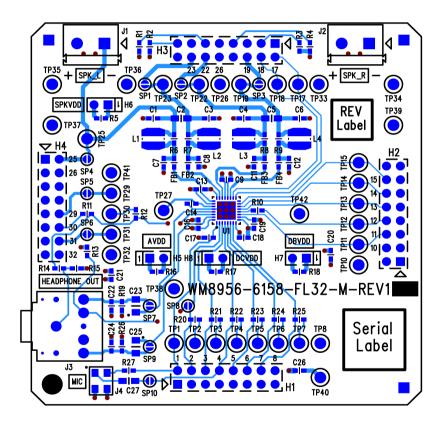


#### **PCB LAYOUT**



Top Layer: Overview

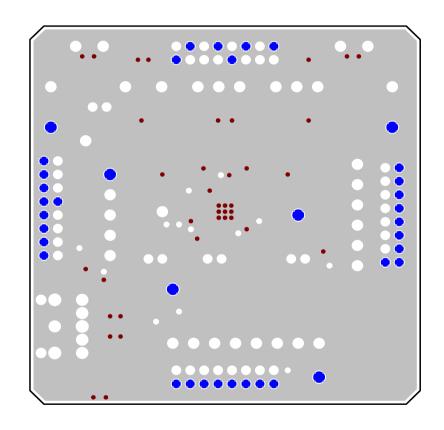




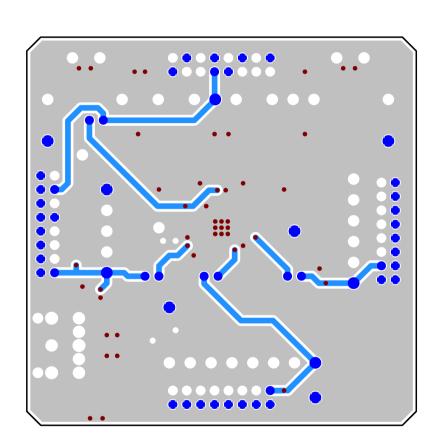
Top Layer: Silkscreen + Copper

Top Layer: Copper



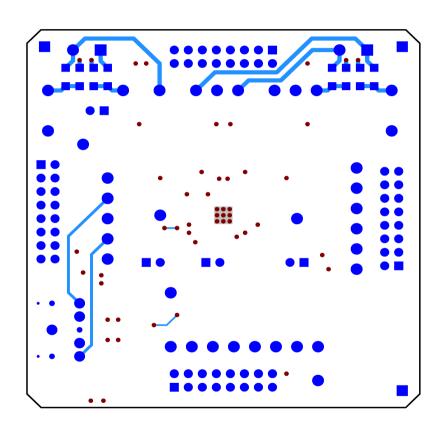


Layer 2: Copper

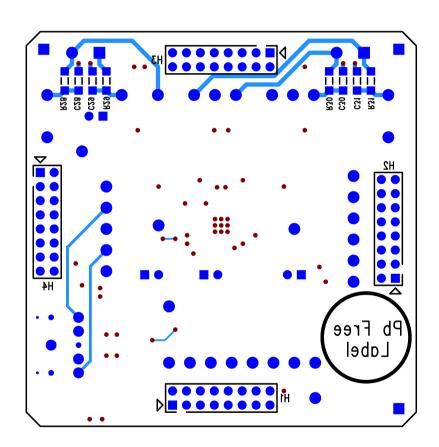


Layer 3: Copper





**Bottom Layer: Copper** 



Bottom Layer: Silkscreen + Copper



#### **APPLICATION SUPPORT**

If you require more information or require technical support, please contact the Wolfson Microelectronics Applications group through the following channels:

Email: apps@wolfsonmicro.com
Telephone Apps: +44 (0) 131 272 7070
Fax: +44 (0) 131 272 7001

Mail: Applications Engineering at the address on the last page

or contact your local Wolfson representative.

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