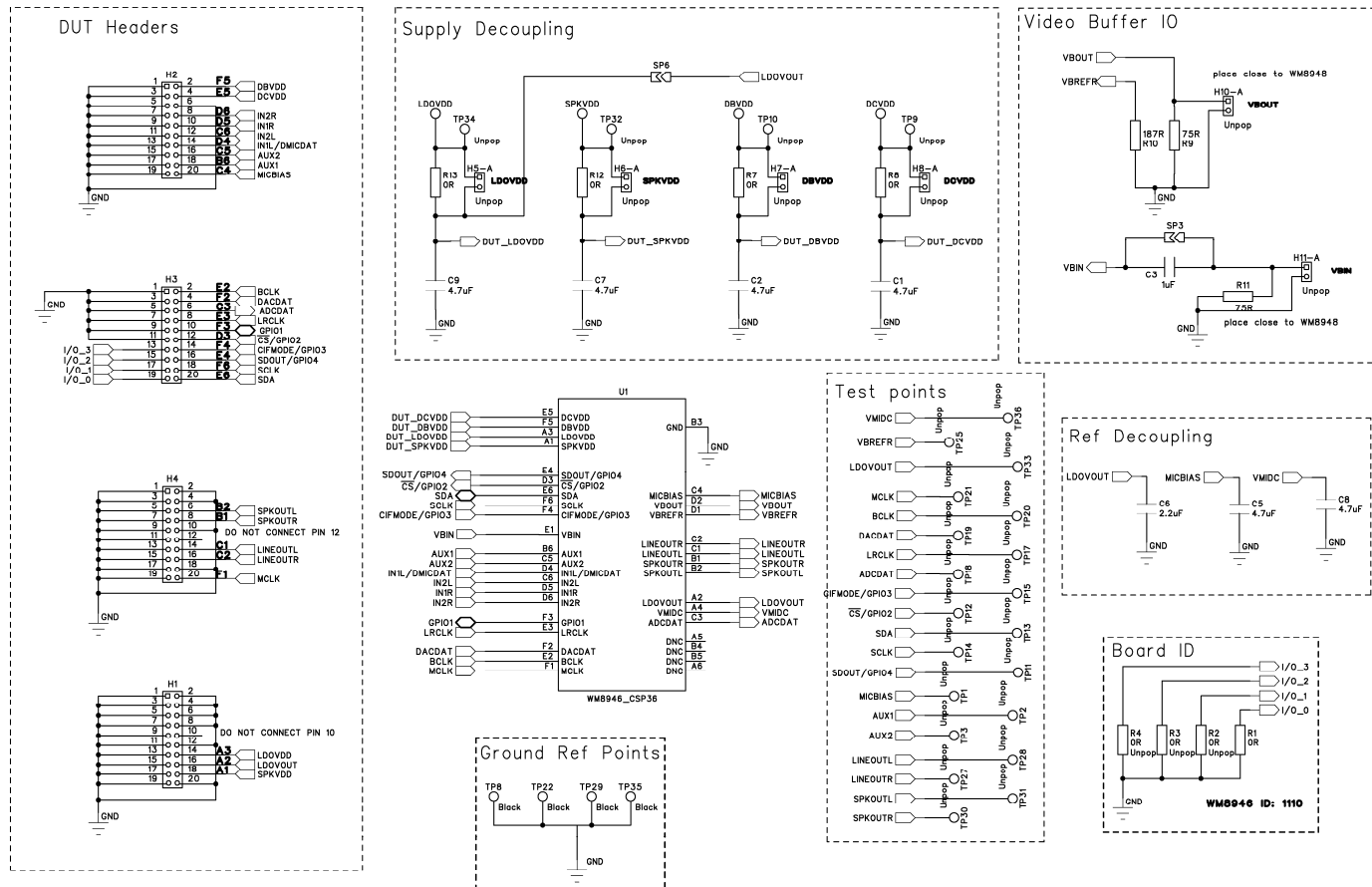


DOC TYPE:	SCHEMATIC AND LAYOUT
BOARD REFERENCE:	WM8946-6229-CS36-M-REV1
BOARD TYPE:	Customer Mini
WOLFSON DEVICE(S):	WM8946
DATE:	June 2009
DOC REVISION:	Rev 1.0

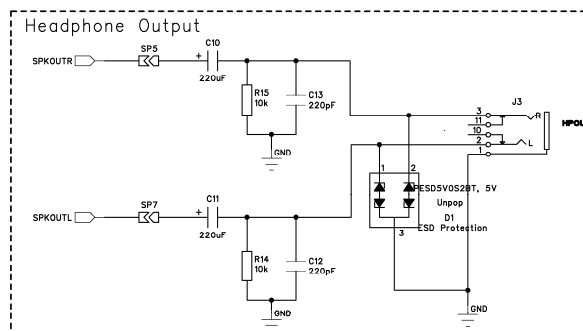
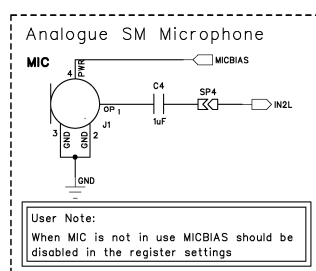
SCHEMATIC

Sheet 1: WM8946

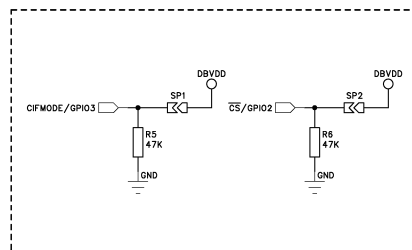




Sheet 2: Analogue I/O



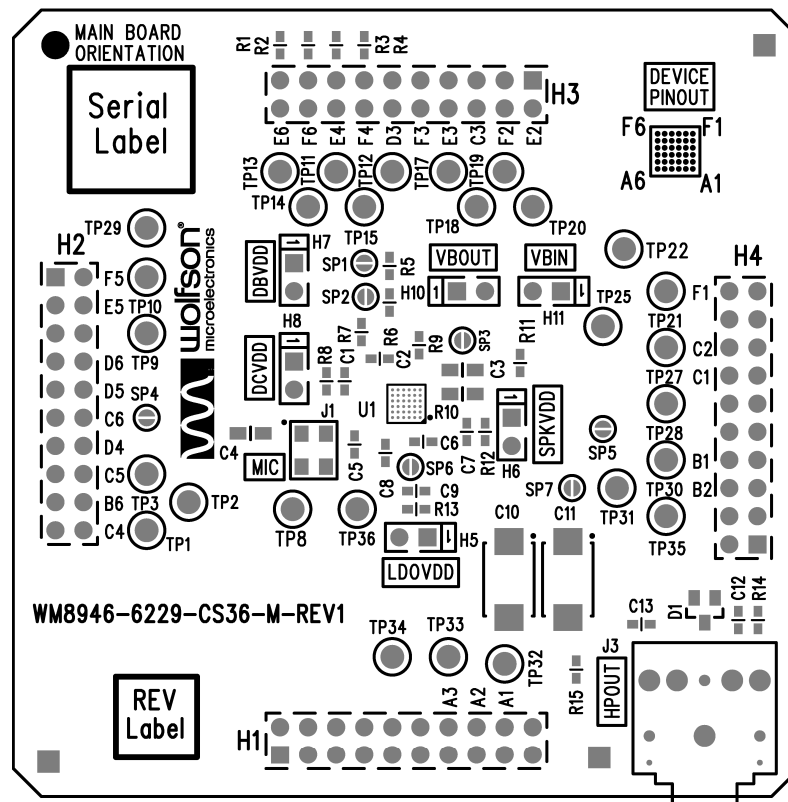
User Note:
Short SP5 & SP7 to use headphone jack.
Links J35 & J40 must be unpopulated on main board.



BILL OF MATERIALS (BOM)

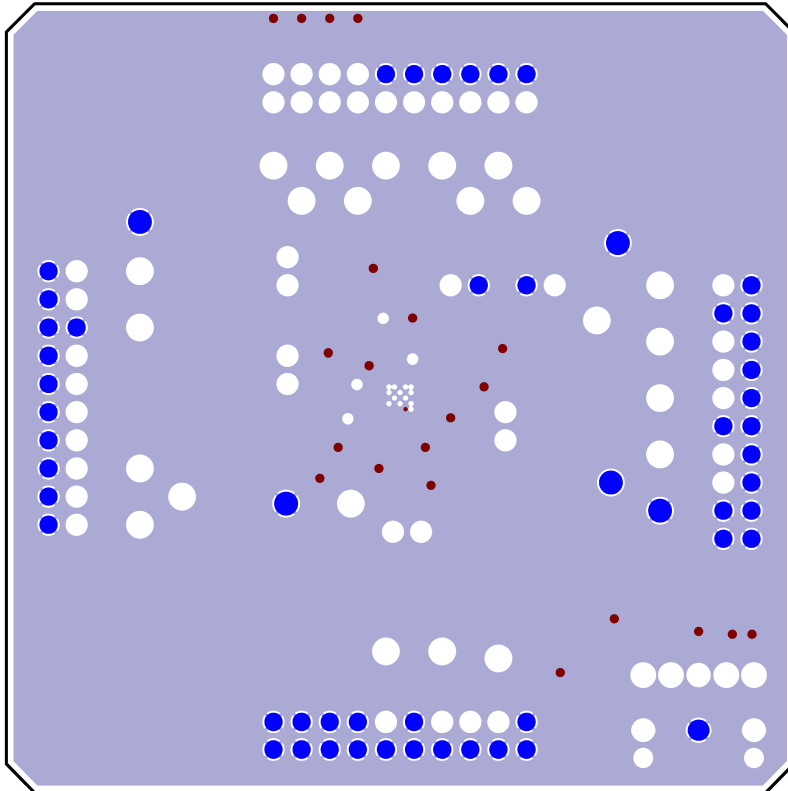
Item	RefDes	Description	Manufacturer	Manufacturer's Part Number
1	J3	3.5mm Jack Socket 6.5mm Centre Height	Technik Industrial	TSH-3565-PBT-TIC-T
2	C6	2.2uF 0603 SMD Ceramic Capacitor 6.3V X5R	MuRata	GRM185R60J225KE26D
3	C1 C2 C5 C7 C8 C9	4.7uF 0603 SMD Ceramic Capacitor 6.3V X5R	MuRata	GRM188R60J475KE19D
4	MISC2	Lead-free label, 15mm round	Brady	Y436425
5	R10	187R 0805 SMD chip resistor 1% 0.125W	Tyco Electronics	RN73C2A187RBTG
6	C10 C11	Tantalum Capacitor SMD-D 220uF - 10V - AVX	AVX	TAJD227K010R
7	C12 C13	220pF 0603 SMD Ceramic Capacitor 50V NPO	AVX	06035A221JAT2A
8	TP8 TP22 TP29 TP35	1.32mm PCB Test Terminal BLACK	Vero	20-2136
9	R14 R15	10k 0603 SMD chip resistor 1% 0.063W	Multicomp	MC 0.063W 0603 1% 10K
10	R5 R6	47K 0603 SMD chip resistor 1% 0.063W	Multicomp	MC 0.063W 0603 1% 47K
11	R9 R11	75R 0603 SMD chip resistor 1% 0.063W	Multicomp	MC 0.063W 0603 1% 75R
12	R1 R7 R8 R12 R13	0R 0603 SMD chip resistor 1% 0.063W	Multicomp	MC 0.063W 0603 0R
13	C3 C4	1uF 0805 SMD Ceramic Capacitor 10V X7R	Multicomp	N0805R105KCT
14	H1 H2 H3 H4	2x10 2.54mm pitch PCB Socket Strip VERTICAL Long Lead	Samtec	SSQ-110-03-G-D
15	PCB1	PCB	Kelan Circuits Ltd	WM8946-6229-CS36-M-REV1
16	U1	WM8946 Stereo Codec with Video Buffer	Wolfson Microelectronics Ltd	WM8946
Unpop				
17	H5 H6 H7 H8 H10 H11	1x2 PCB Pin Header 0.1" VERTICAL	Harwin	M20-9990245
18	D1	TVS Diode PESD5V0S2BT Vwm=5V dual ESD Protection SOT23	Philips	PESD5V0S2BT
19	R2 R3 R4	0R 0603 SMD chip resistor 1% 0.063W	Multicomp	MC 0.063W 0603 0R
20	SP1 SP2 SP3 SP4 SP5 SP6 SP7	Surface mount shorting point	N/A	N/A
21	TP1 TP2 TP3 TP9 TP10 TP11 TP12 TP13 TP14 TP15 TP17 TP18 TP19 TP20 TP21 TP25 TP27 TP28 TP30 TP31 TP32 TP33 TP34 TP36	1.32mm off-board connection point	N/A	N/A
22	J1	WM7110 Analogue Silicon Surface Mount Microphone, Unamplified	Wolfson Microelectronics	WM7110EMS

PCB LAYOUT

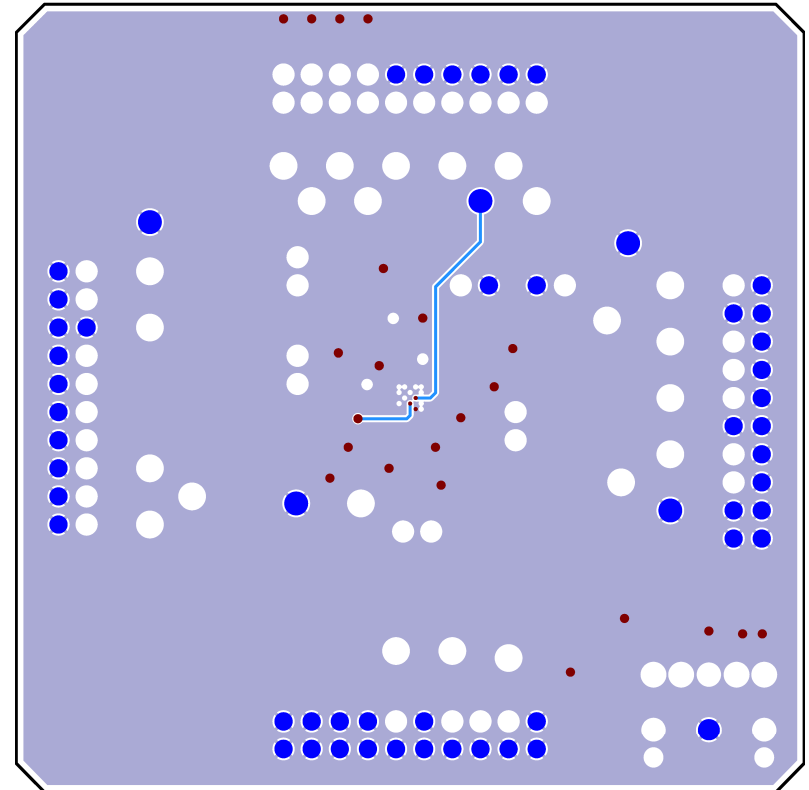


Top Layer: Overview

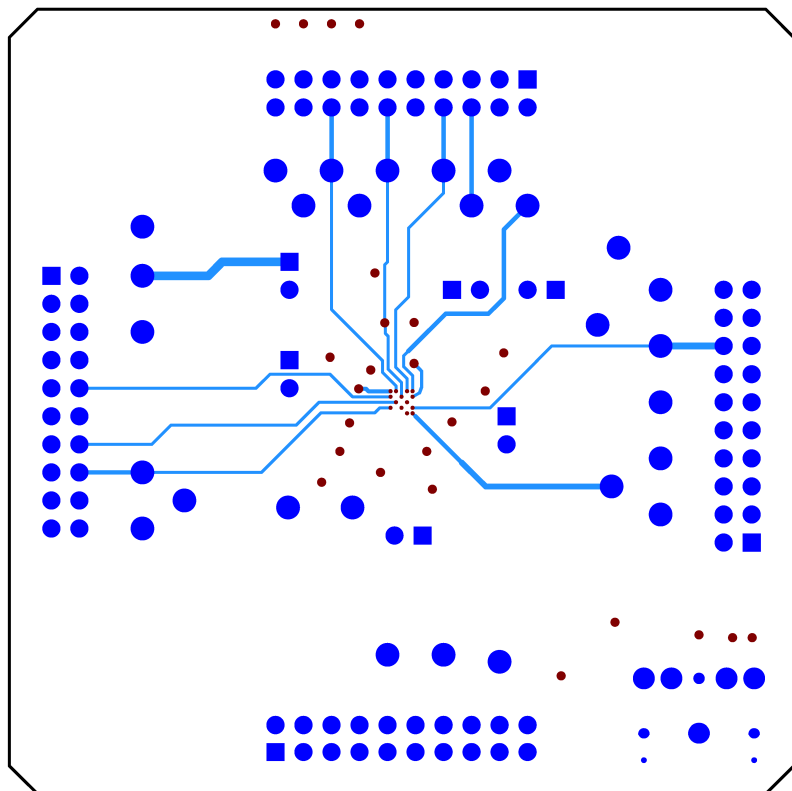




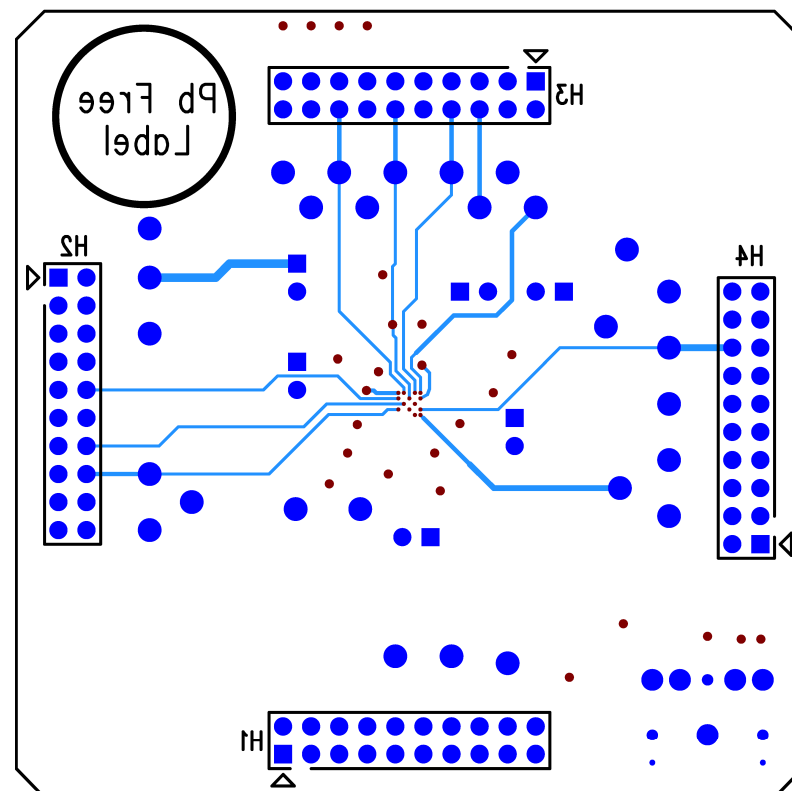
Layer 2: Copper



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:

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Fax: +44 (0) 131 272 7001
Mail: Applications Engineering at the address on the last page

or contact your local Wolfson representative.

Additional information may be made available on our web site at: <http://www.wolfsonmicro.com>

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