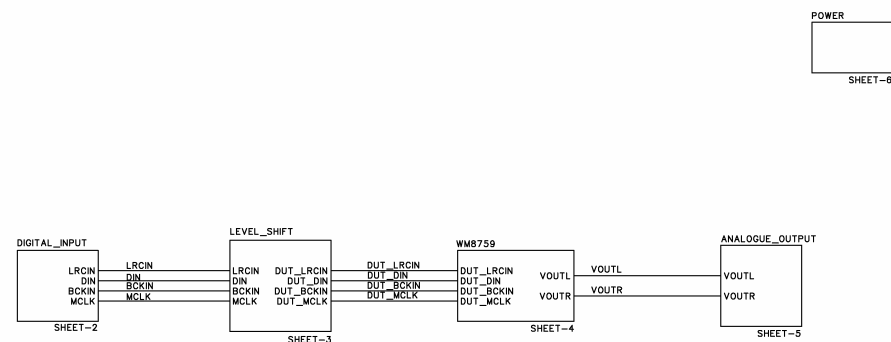
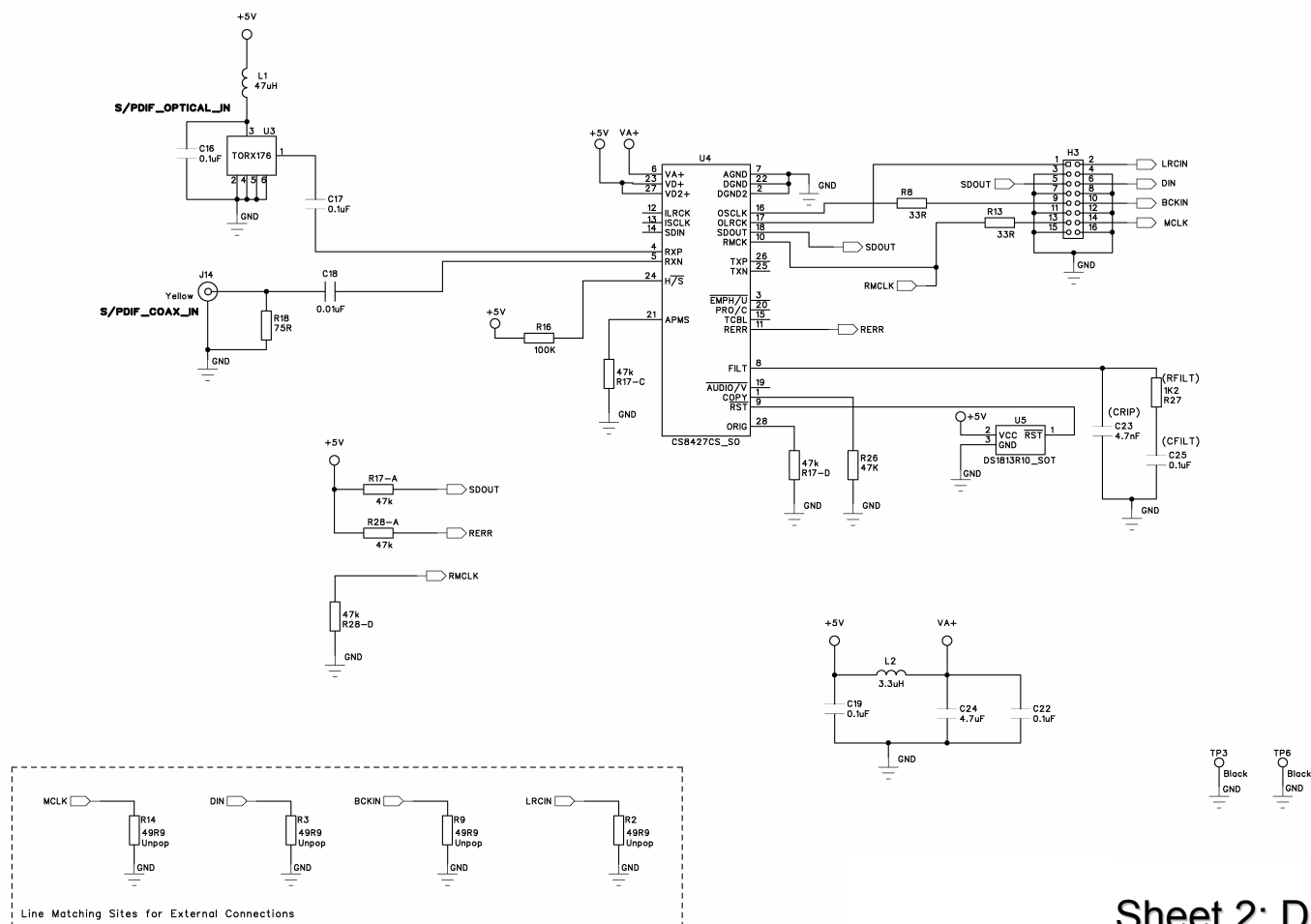


DOC TYPE:	Schematic and Layout
BOARD REFERENCE:	WM8759-6116-D14-EV1-REV1
BOARD TYPE:	Customer Main Board / Customer Mini Board
WOLFSON DEVICE(S):	WM8759
DATE:	March 2008
DOC REVISION:	Rev 1.1

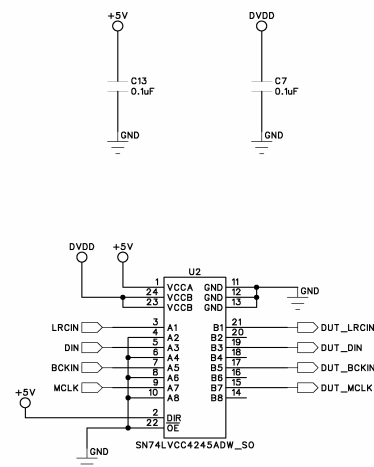
Schematic

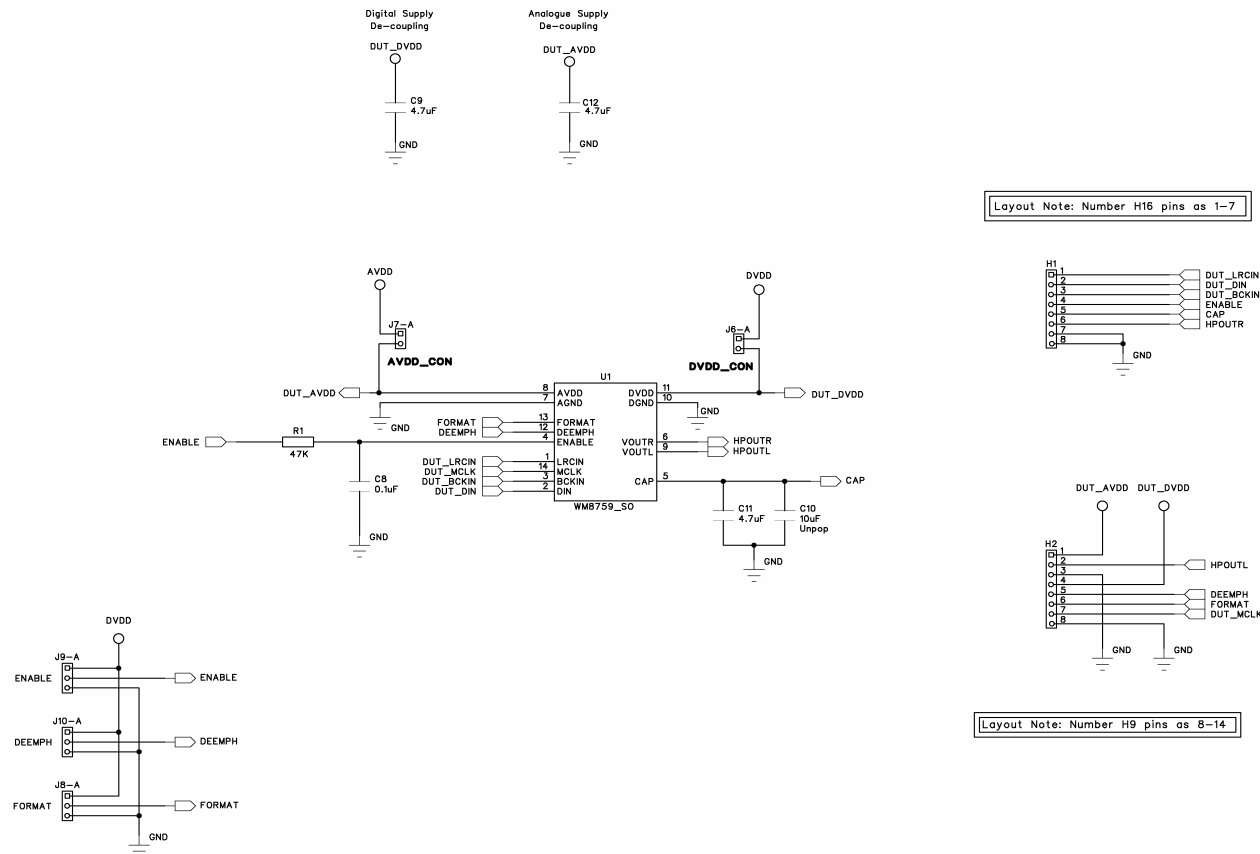


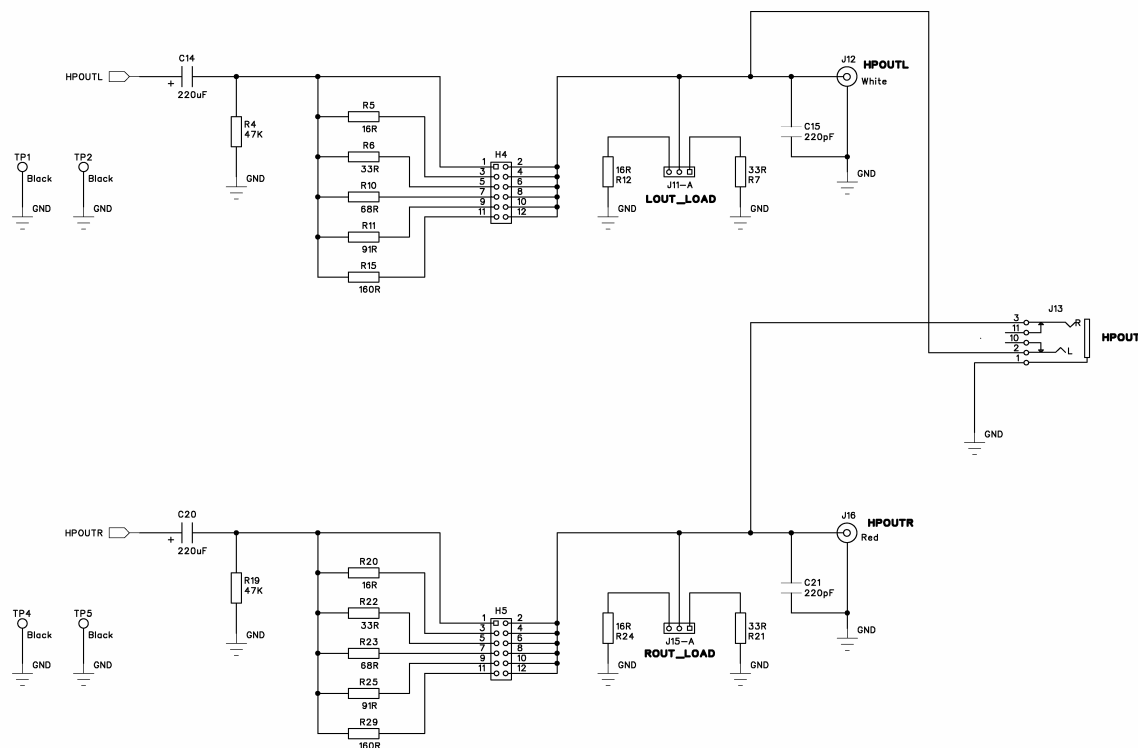
Sheet 1: Functional Diagram

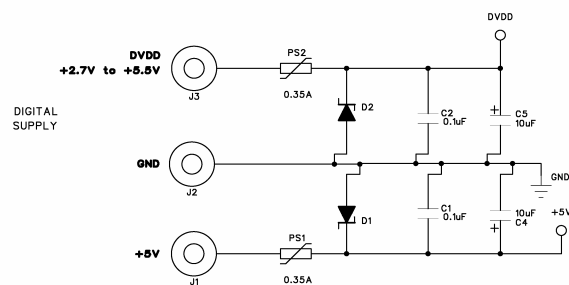
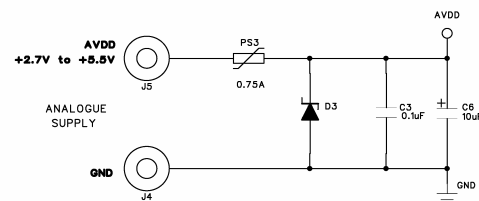


Sheet 2: Digital Input









TABLES & TEXT TO GO ON PCB

H3
21 LRCIN
81 DN
101 BCKIN
141 MCLK

To go next to H3

LNK_H3-1 YELLOW
Fit to H3:1-2

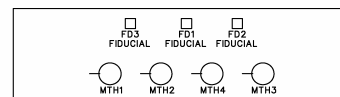
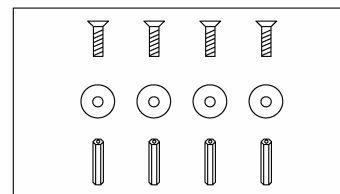
LNK_H3-2 YELLOW
Fit to H3:5-6

LNK_H3-3 YELLOW
Fit to H3:9-10

LNK_H3-4 YELLOW
Fit to H3:13-14

Layout Note:
BOLD text throughout .sch is to go on PCB

STANDARD MECHANICAL REQUIREMENTS



	Short 1-2	Short 2-3
J8-B	I2S/DSP early	16-bit RJ/DSP late
PCB Ref: FORMAT		

LNK_J8	YELLOW
1-2	

	Short 1-2	Short 2-3
J9-B	Enable	Disabled
PCB Ref: ENABLE		

LNK_J9	YELLOW
1-2	

	Short 1-2	Short 2-3
J10-B	De-emphasis On	De-emphasis Off
PCB Ref: DEEMPH		

LNK_J10	YELLOW
2-3	

	Short 1-2	Short 2-3
J11-B	33R Load	16R Load
PCB Ref: LOUT_LOAD		

No Link

	Short 1-2	Short 2-3
J15-B	33R Load	16R Load
PCB Ref: ROUT_LOAD		

No Link

	Short	Open
J6-B	Connect DVDD	Measure Current
PCB Ref: DVDD_CON		

LNK_J6	RED
Short	

	Short	Open
J7-B		
PCB Ref:		

LNK_J7	RED

H4	Output Attenuation	
	16R Load	32R Load
1-2	0dB	0dB
3-4	-6dB	-3dB
5-6	-9dB	-6dB
7-8	-14dB	-9dB
9-10	-16dB	-12dB
11-12	-21dB	-15dB

LNK_H4	YELLOW
Fit to H4:1-2	

H5	Output Attenuation	
	16R Load	32R Load
1-2	0dB	0dB
3-4	-6dB	-3dB
5-6	-9dB	-6dB
7-8	-14dB	-9dB
9-10	-16dB	-12dB
11-12	-21dB	-15dB

LNK_H5	YELLOW
Fit to H4:1-2	

Bill Of Materials (BOM)

<i>Item</i>	<i>RefDes</i>	<i>Description</i>	<i>Manufacturer</i>	<i>Manufacturer's Part Number</i>	<i>Qty</i>
1	J13	3.5mm Jack Socket 6.5mm Centre Height	Technik Industrial	TSH3565	1
2	U2	SN74LVCC4245A Octal Dual Supply(5V, 3-5V) Transceiver SO	Texas Instruments	SN74LVCC4245ADW	1
3	C9 C11 C12 C24	4.7uF 0603 SMD Ceramic Capacitor 6.3V X5R	Murata	GRM188R60J475KE19D	4
4	L2	3.3uH 1210 Surface Mount Inductor '1210A series'	Epcos	B82422A1332K100	1
5	J14	Phono Socket PCB mount YELLOW	Dragon City	RS109 - Yellow	1
6	J16	Phono Socket PCB mount RED	Dragon City	RS-109 Red	1
7	J12	Phono Socket PCB mount WHITE	Dragon City	RS-109 White	1
8	H4 H5	2x6 2.54mm pitch PCB Pin Header VERTICAL	Harwin	M20-9980645	2
9	H3	2x8 2.54mm pitch PCB Pin Header VERTICAL	Harwin	M20-9980845	1
10	J6 J7	1x2 PCB Pin Header 0.1" VERTICAL	Harwin	M20-9990245	2
11	J8 J9 J10 J11 J15	1x3 2.54mm Header Vertical	Harwin	M20-9990345	5
12	H1 H2	1x8 2.54mm pitch PCB Pin Header VERTICAL	Harwin	M20-9990845	2
13	PS1 PS2	0.35A Poly Switch 1210	Tyco	MICROSMMD035F-2	2
14	L1	47uH 1210 Surface Mount Inductor 'PA series'	Panasonic	ELJPA470KF	1
15	C14 C20	Tantalum Capacitor SMD-D 220uF - 10V - AVX	AVX	TAJD227K010R	2
16	C23	4.7nF 0603 SMD Ceramic Capacitor 50V X7R	AVX	06035C472KAT2A	1

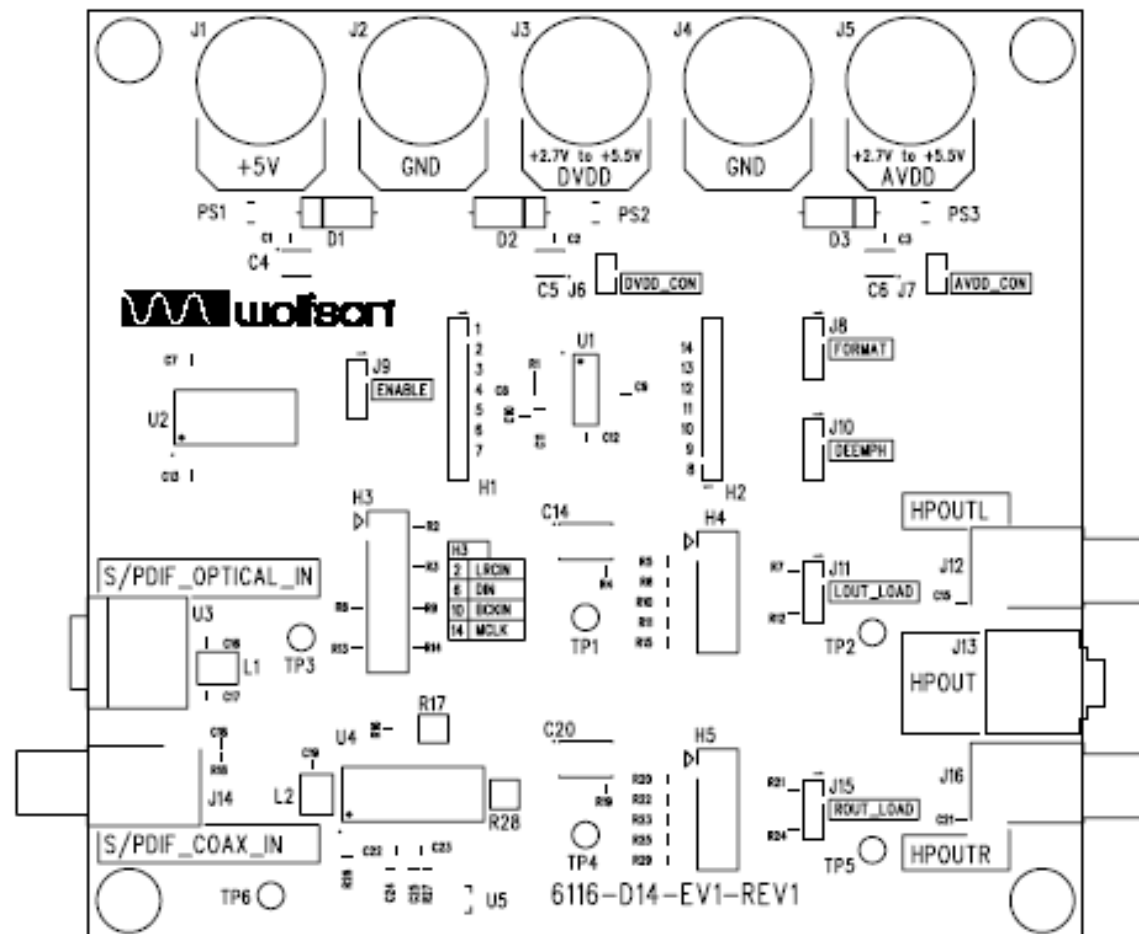
<i>Item</i>	<i>RefDes</i>	<i>Description</i>	<i>Manufacturer</i>	<i>Manufacturer's Part Number</i>	<i>Qty</i>
17	C1 C2 C3 C7 C8 C13 C16 C17 C19 C22 C25	0.1uF 0603 SMD Ceramic Capacitor 16V X7R	Phycomp	06032R104K7B2	11
18	C15 C21	220pF 0603 SMD Ceramic Capacitor 50V NPO	AVX	06035A221JAT2A	2
19	C4 C5 C6	Tantalum Capacitor SMD-B 10uF - 16V - AVX	AVX	TAJB106K016R	3
20	P1 P2 P3 P4	Hexagonal brass M3 size spacer 20mm length	Harwin	R6379-02	4
21	C18	0.01uF 0603 SMD Ceramic Capacitor 50V X7R	Phycomp	2238 586 15636	1
22	TP1 TP2 TP3 TP4 TP5 TP6	1.32mm PCB Test Terminal BLACK	VERO	20-2136	6
23	SC1 SC2 SC3 SC4	Slotted Panhead Screw - M3 thread; 12mm long	Roebuck	PFP527	4
24	W1 W2 W3 W4	Plain M3 size washer	Roebuck	PFP2497	4
25	R17 R28	47k 1206 SMD chip 4 resistor array 5% 0.063W	Phycomp	2350 035 10473	2
26	R16	100K 0603 SMD chip resistor 1% 0.063W	Multicomp	MC 0.063W 0603 1% 100K	1
27	R27	1K2 0603 SMD chip resistor 1% 0.063W	Multicomp	MC 0.063W 0603 1% 1K2	1
28	R15 R29	160R 0603 SMD chip resistor 1% 0.063W	Multicomp	MC0.063W06031%160R	2
29	R5 R12 R20 R24	16R 0603 SMD chip resistor 1% 0.063W	Multicomp	MC 0.063W 0603 1% 16R	4
30	R6 R7 R8 R13 R21 R22	33R 0603 SMD chip resistor 1% 0.063W	Multicomp	MC 0.063W 0603 1% 33R	6
31	R1 R4 R19 R26	47K 0603 SMD chip resistor 1% 0.063W	Multicomp	MC 0.063W 0603 1% 47K	4
32	R10 R23	68R 0603 SMD chip resistor 1% 0.063W	Multicomp	MC0.063W06031%68R	2

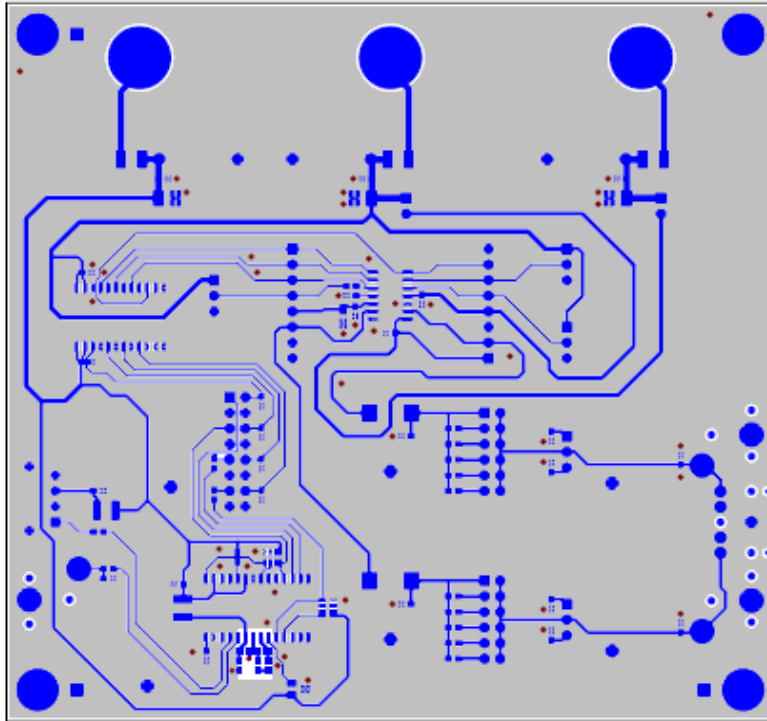
<i>Item</i>	<i>RefDes</i>	<i>Description</i>	<i>Manufacturer</i>	<i>Manufacturer's Part Number</i>	<i>Qty</i>
33	R18	75R 0603 SMD chip resistor 1% 0.063W	Multicomp	MC 0.063W 0603 1% 75R	1
34	R11 R25	91R 0603 SMD chip resistor 1% 0.063W	Multicomp	MC0.063W06031%91R	2
35	D2	1N5337B 4.7V 5W Zener Diode PTH	ON Semiconductor	1N5337BG	1
36	D1 D3	1N5341B 6.2V 5W Zener Diode PTH	ON Semiconductor	1N5341BG	2
37	U5	DS1813 5V active Low Power-On-Reset chip SOT	Dallas Semiconductor	DS1813R-10+	1
38	J1 J2 J3 J4 J5	4mm Non-Insulated Panel Socket 16A	PJP	3110I	5
39	LNK_J6 LNK_J7	0.1" OPEN JUMPER LINK RED	Protech	22-3565	2
40	LNK_H3-1 LNK_H3-2 LNK_H3-3 LNK_H3-4 LNK_H4 LNK_H5 LNK_J8 LNK_J9 LNK_J10	0.1" OPEN JUMPER LINK YELLOW	Protech	22-3570	9
41	U3	TORX176 Digital Audio Optical Receiver	Toshiba	TORX176(F)	1
42	PS3	0.75A Poly Switch 1210	Tyco	MICROSMD075F	1

<i>Item</i>	<i>RefDes</i>	<i>Description</i>	<i>Manufacturer</i>	<i>Manufacturer's Part Number</i>	<i>Qty</i>
43	U4	CS8427 96KHz Audio Transceiver	Crystal Semiconductor	CS8427-CSZ	1
44	U1	WM8759 Stereo DAC SO	Wolfson Microelectronics	WM8759ED	1
UN POP					
45	C10	10uF 0805 SMD Ceramic Capacitor 6.3V X5R	Murata	GRM21BR60J106KE19L	1
46	R2 R3 R9 R14	49R9 0603 SMD chip resistor 1% 0.063W	Multicomp	MC 0.063W 0603 1% 49R9	4

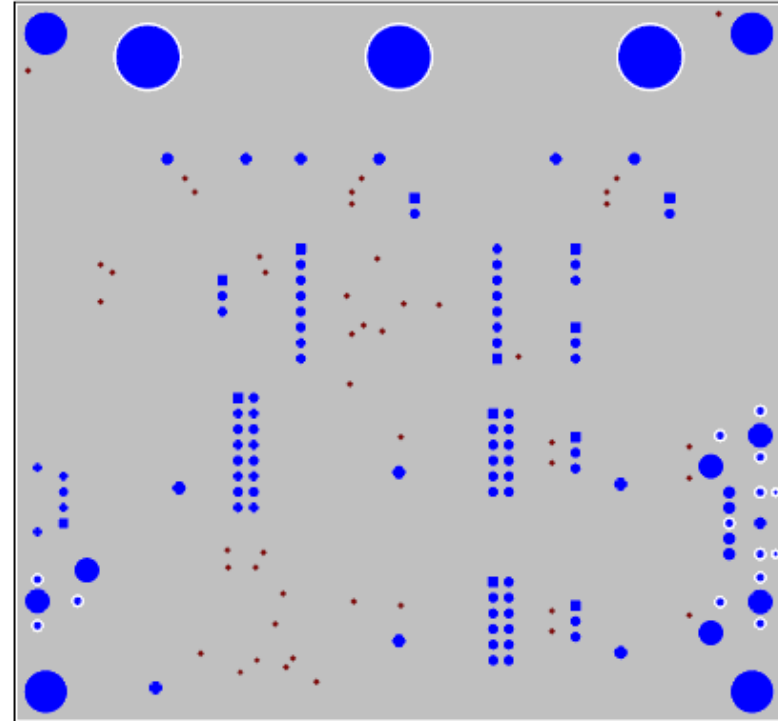
Layout

Top Silkscreen



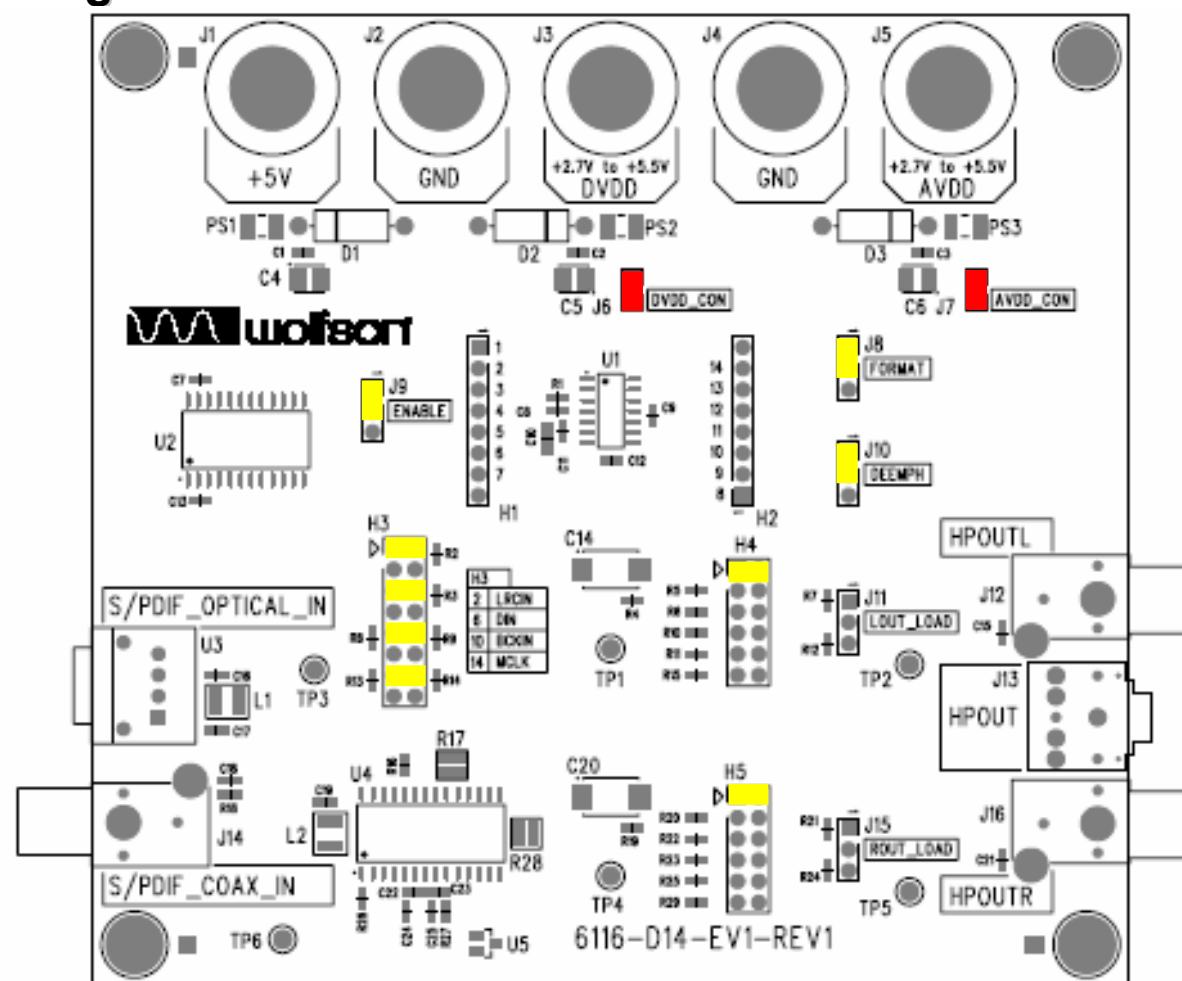


Layer 1 - Top Copper



Layer 2 - Bottom Copper

Generic Board Configuration



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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Telephone Apps: +44 (0) 131 272 7070
Fax: +44 (0) 131 272 7001
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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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