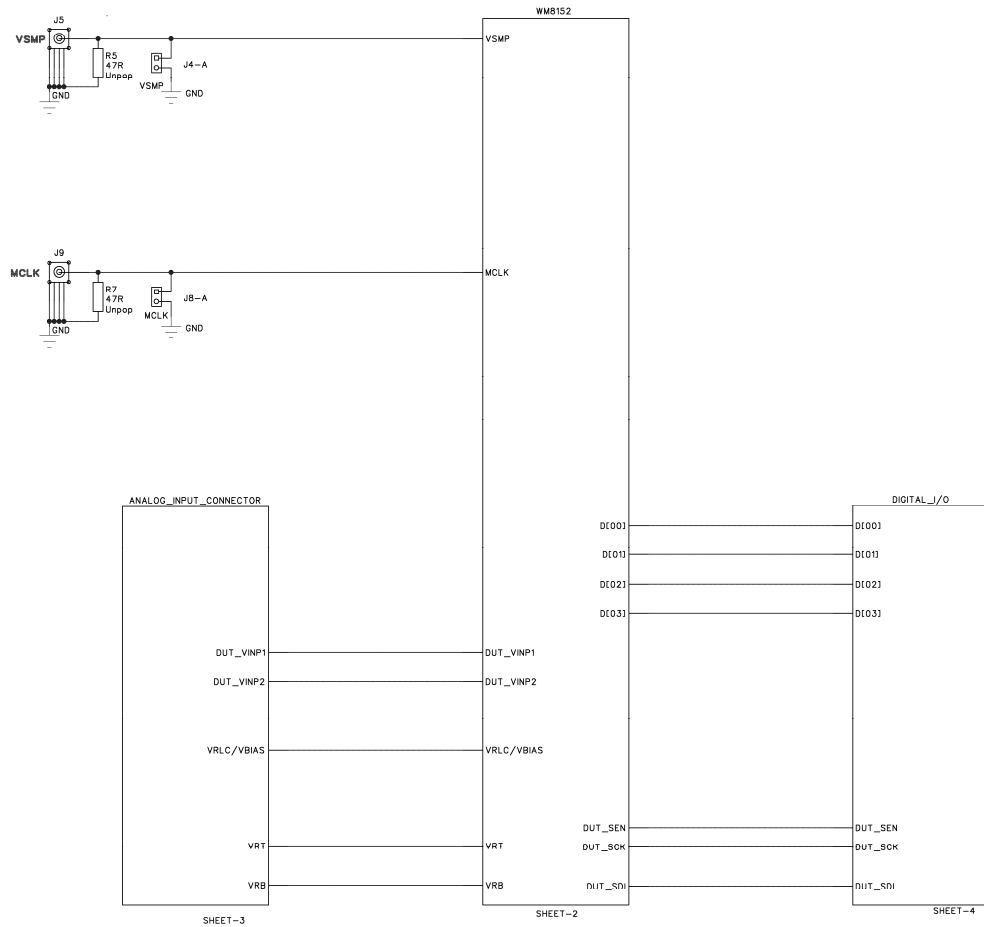
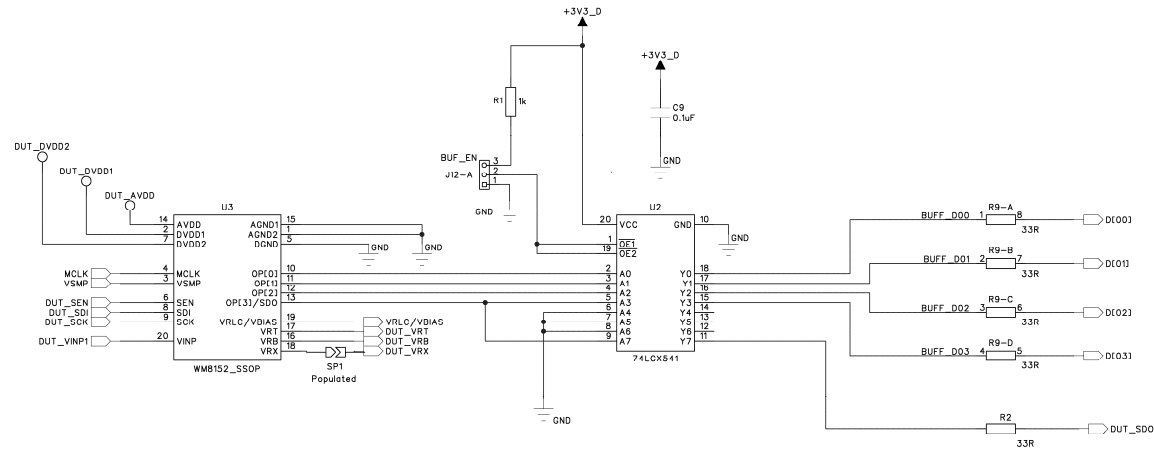


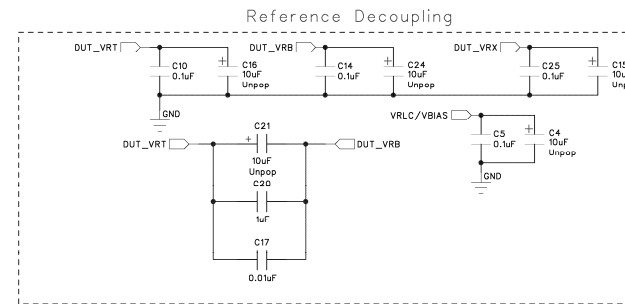
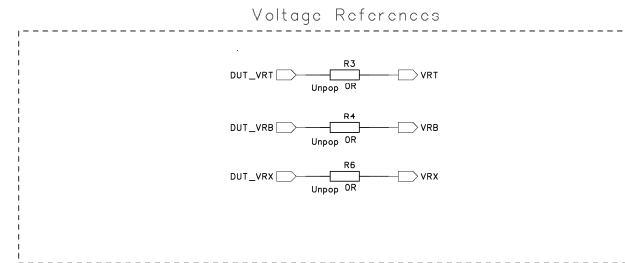
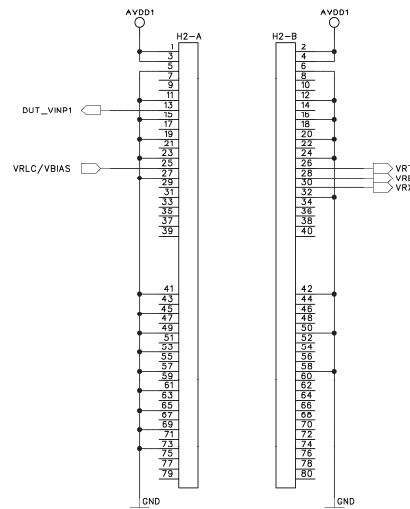
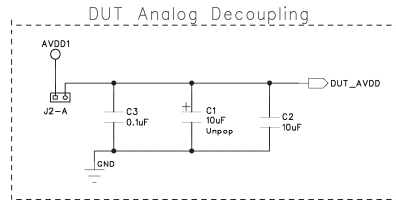
DOC TYPE:	SCHEMATIC AND LAYOUT
BOARD REFERENCE:	WM8152-6109-DS20-M-REV1
BOARD TYPE:	Customer Mini
WOLFSON DEVICE(S):	WM8152
DATE:	October 2008
DOC REVISION:	Rev 1.0

SCHEMATIC

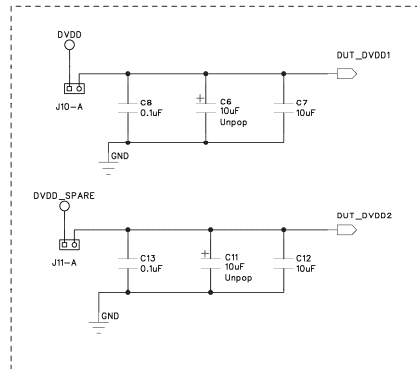
Sheet 1: Block Diagram



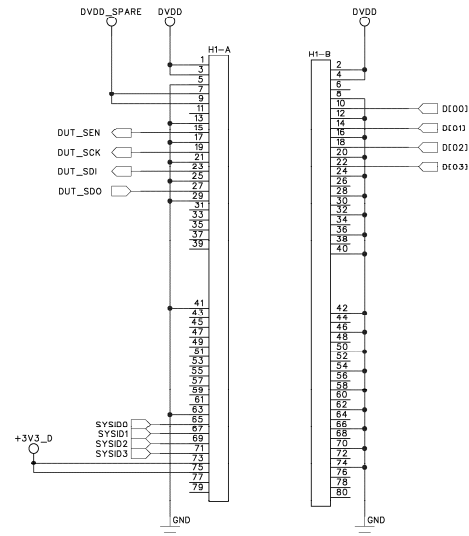
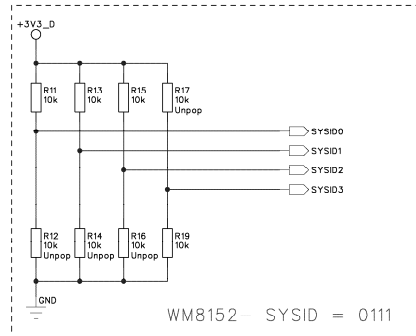




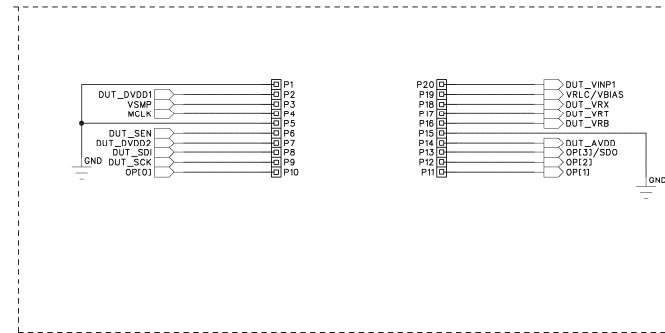
DUT Digital Decoupling



SYSID



DUT Pin Header



	Short	Open
J2-B	AVDD to DUT	No AVDD to DUT

PCB Ref: AVDD

LNK_J2
RED
Fit to J2:1-2
Short

	Short	Open
J11-B	DVDD2 to DUT	No DVDD2 to DUT

PCB Ref: DVDD2

LNK_J11
RED
Fit to J11:1-2
Short

	Short	Open
J10-B	DVDD1 to DUT	No DVDD1 to DUT

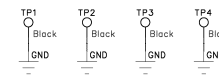
PCB Ref: DVDD1

LNK_J10
RED
Fit to J10:1-2
Short

	Short 1-2	Short 2-3
J12-B	Ext_buffer-enabled	Ext_buffer-disabled

PCB Ref: BUF_EN

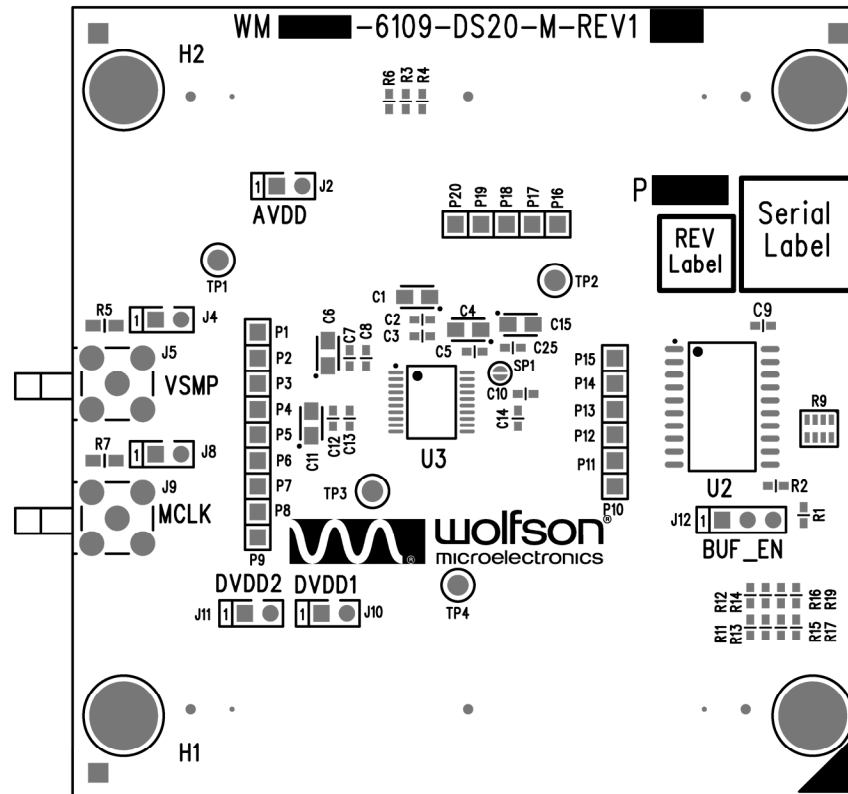
LNK_J12
YELLOW
Fit to J12:1-2
1 2



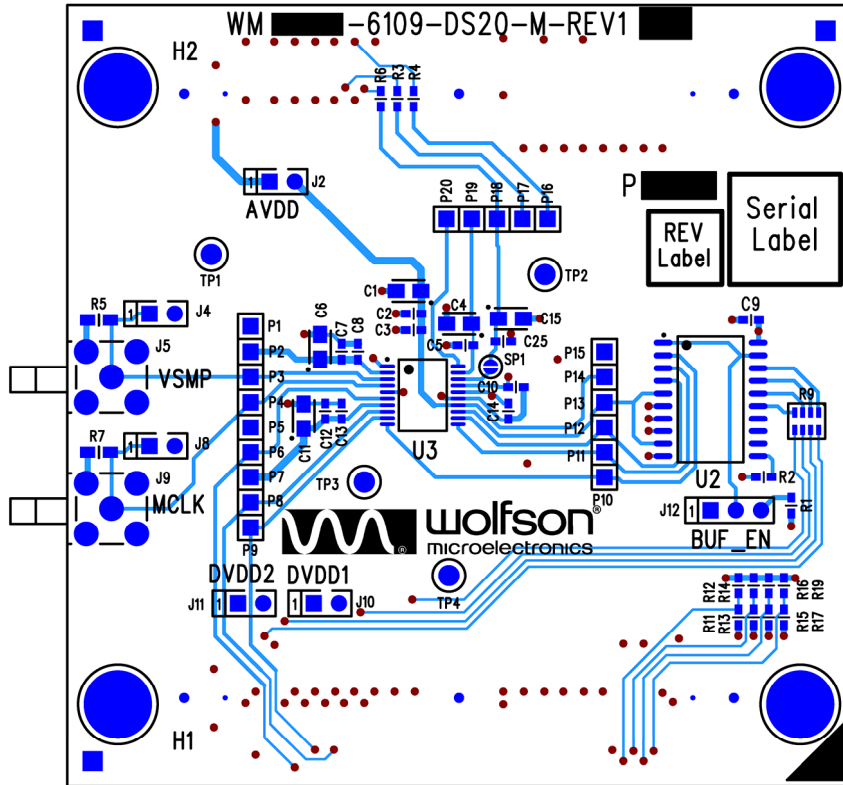
BILL OF MATERIALS (BOM)

Item	RefDes	Description	Manufacturer	Manufacturer's Part Number
1	R19	10k 0603 SMD chip resistor 1% 0.063W	Multicomp	MC 0.063W 0603 1% 10K
2	C2 C7 C12	10uF 0603 SMD Ceramic Capacitor 6.3V X5R	MuRata	GRM188R60J106ME47D
3	U2	Octal Buffer/Line Driver	Fairchild Semiconductor	74LCX541WM
4	J2 J4 J8 J10 J11	1x2 PCB Pin Header 0.1" VERTICAL	Harwin	M20-9990245
5	P1 P2 P3 P4 P5 P6 P7 P8 P9 P10 P11 P12 P13 P14 P15 P16 P17 P18 P19 P20	1x1 2.54mm pitch PCB Pin Header VERTICAL	Harwin	M20-9990245
6	J12	1x3 2.54mm Header Vertical	Harwin	M20-9990345
7	J5 J9	SMB Connector PCB Mount 50 Ohm HORIZONTAL	TYCO ELECTRONICS / GREENPAR	1-1337481-0
8	C3 C5 C8 C9 C10 C13 C14 C25	0.1uF 0603 SMD Ceramic Capacitor 16V X7R	Phycomp	2238 786 15649
9	C17	0.01uF 0603 SMD Ceramic Capacitor 50V X7R	Phycomp	2238 586 15636
10	TP1 TP2 TP3 TP4	1.32mm PCB Test Terminal BLACK	VERO	20-2136
11	R9	33R 1206 SMD chip 4 resistor array 5% 0.063W	Phycomp	2350 035 10339
12	R1	1k 0603 SMD chip resistor 1% 0.063W	Multicomp	MC 0.063W 0603 1% 1K
13	R11 R13 R15	10k 0603 SMD chip resistor 1% 0.063W	Multicomp	MC 0.063W 0603 1% 10K
14	R2	33R 0603 SMD chip resistor 1% 0.063W	Multicomp	MC 0.063W 0603 1% 33R
15	C20	1uF 0805 SMD Ceramic Capacitor 10V X7R	Multicomp	N0805R105KCT
16	SP1	Surface mount shorting point	N/A	N/A
17	LNK_J2 LNK_J10 LNK_J11	0.1" OPEN JUMPER LINK RED	Protech	22-3565
18	LNK_J12	0.1" OPEN JUMPER LINK YELLOW	Protech	22-3570
19	U3	WM8152 Single Channel 12-bit AFE with 4-bit wide output SSO	Wolfson Microelectronics	WM8152CDS
20	PCB2	PCB	Wolfson Microelectronics	WMXXXX-6109-DS20-M-REV1
UNPOP				
21	H1 H2	FSI-140 connector mating footprint		
22	C1 C4 C6 C11 C15 C16 C21 C24	10uF 10V SMD Tantalum Capacitor case A	Kemet	T491A106K010AT
23	R12 R14 R16 R17	10k 0603 SMD chip resistor 1% 0.063W	Multicomp	MC 0.063W 0603 1% 10K
24	R3 R4 R6	0R 0603 SMD chip resistor 1% 0.063W	Multicomp	MC 0.063W 0603 0R
25	R5 R7	47R 0805 SMD chip resistor 1% 0.1W	Multicomp	MC 0.1W 0805 1% 47R

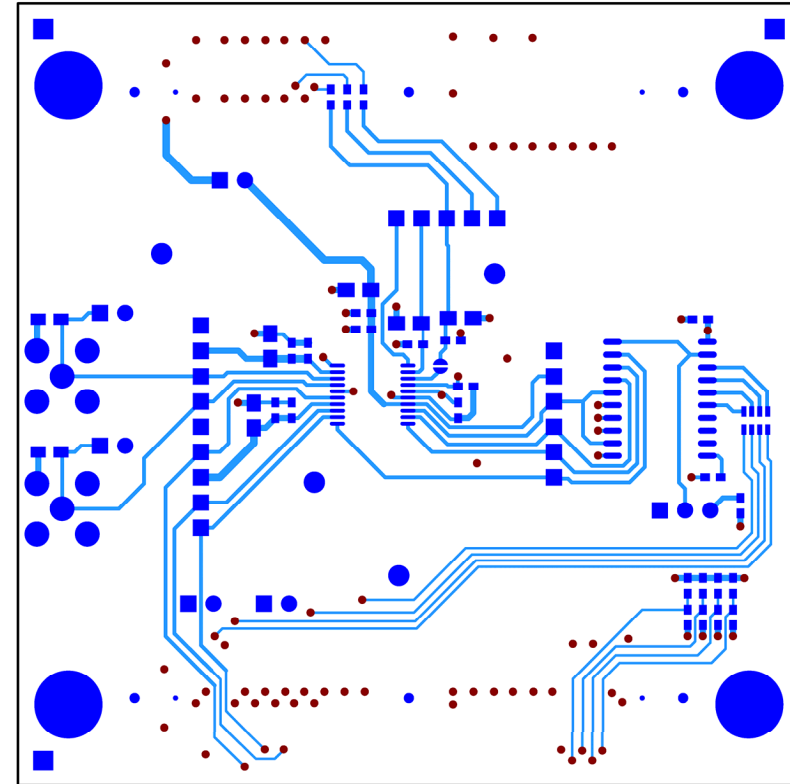
PCB LAYOUT



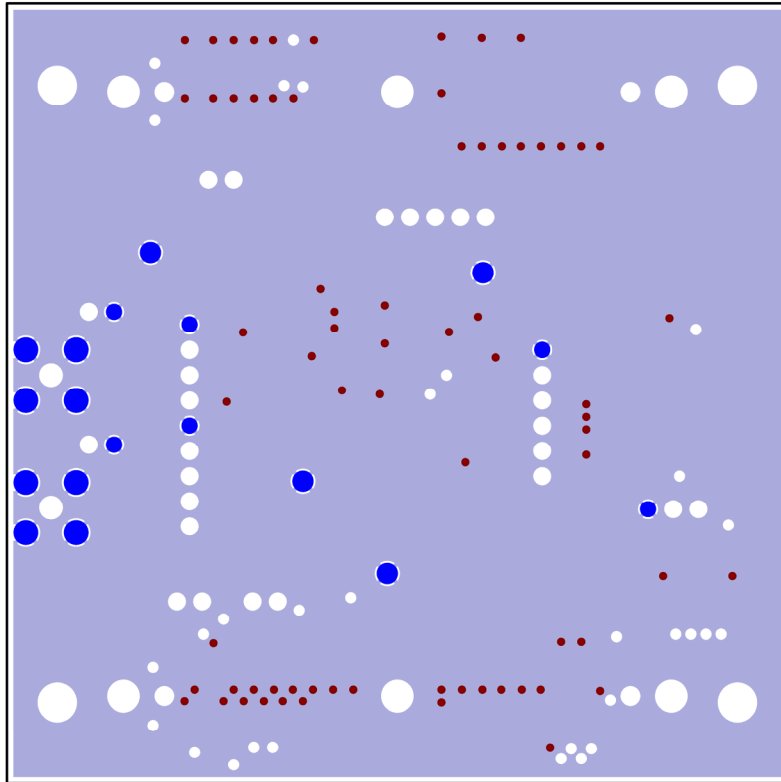
Top Layer: Overview



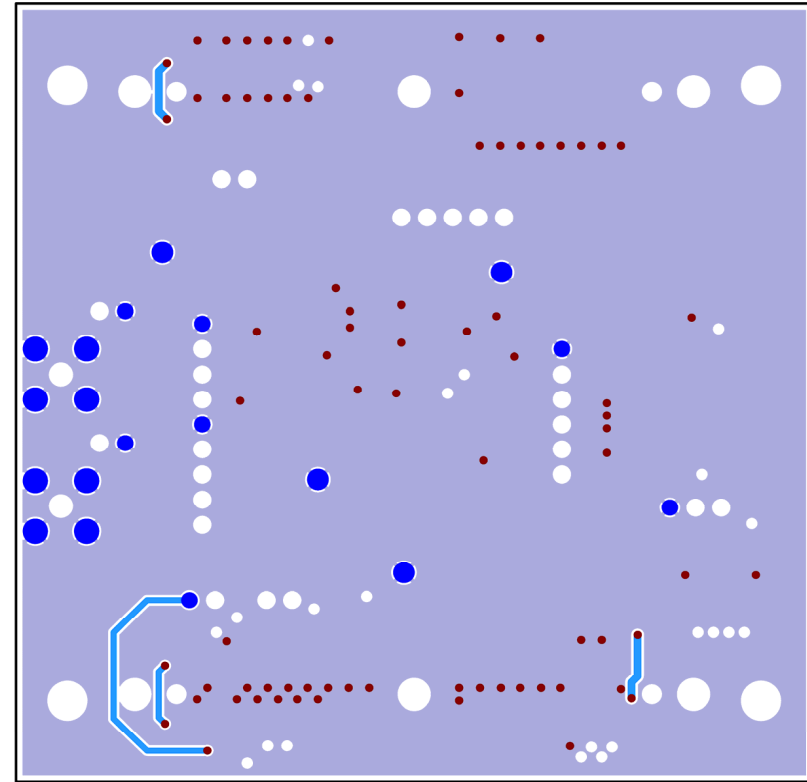
Top Layer: Silkscreen + Copper



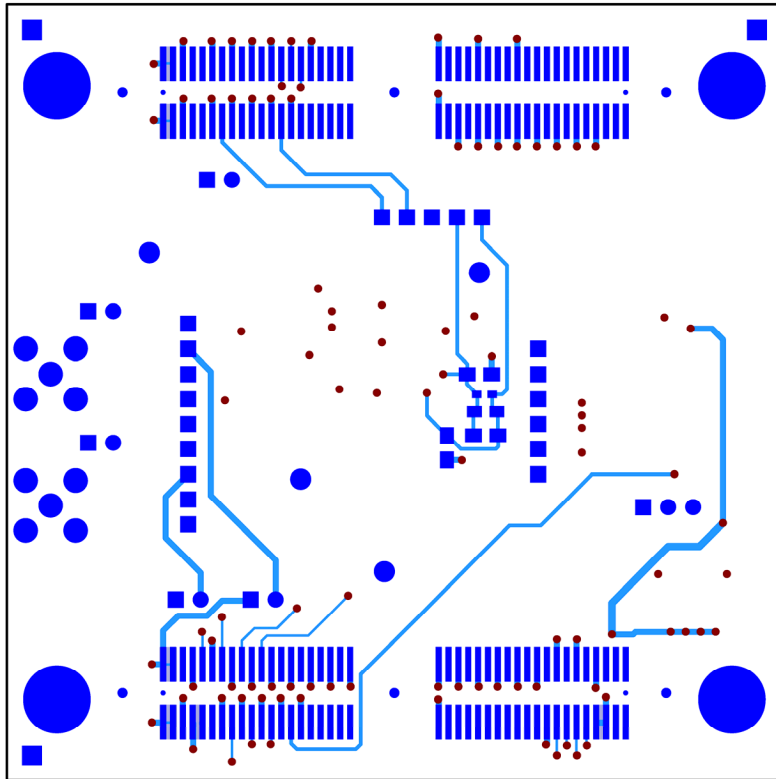
Top Layer: Copper



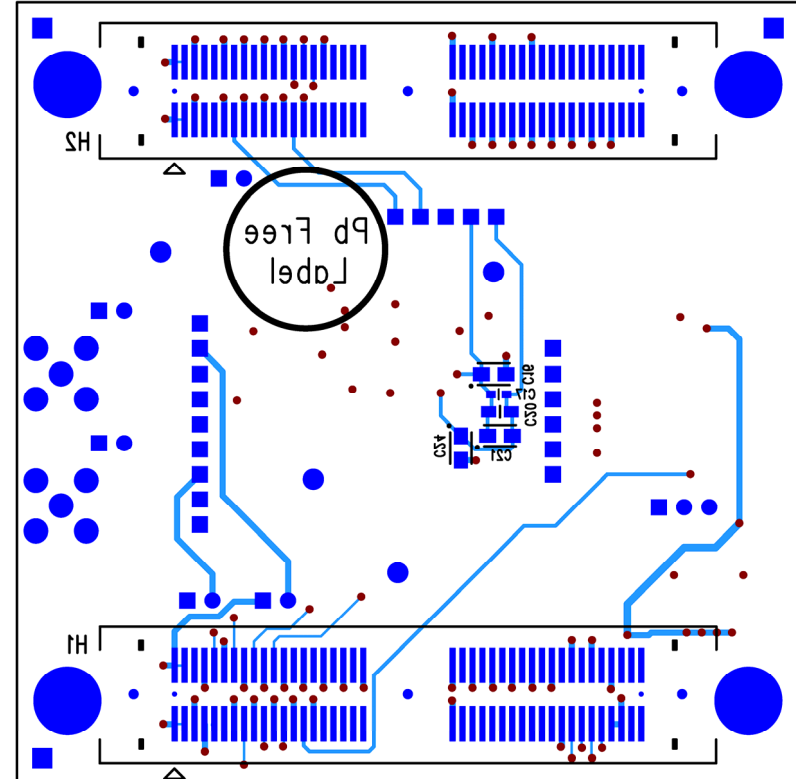
Layer 2: Copper



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.

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

IMPORTANT NOTICE

Wolfson Microelectronics plc (“Wolfson”) products and services are sold subject to Wolfson’s terms and conditions of sale, delivery and payment supplied at the time of order acknowledgement.

Wolfson warrants performance of its products to the specifications in effect at the date of shipment. Wolfson reserves the right to make changes to its products and specifications or to discontinue any product or service without notice. Customers should therefore obtain the latest version of relevant information from Wolfson to verify that the information is current.

Testing and other quality control techniques are utilised to the extent Wolfson deems necessary to support its warranty. Specific testing of all parameters of each device is not necessarily performed unless required by law or regulation.

In order to minimise risks associated with customer applications, the customer must use adequate design and operating safeguards to minimise inherent or procedural hazards. Wolfson is not liable for applications assistance or customer product design. The customer is solely responsible for its selection and use of Wolfson products. Wolfson is not liable for such selection or use nor for use of any circuitry other than circuitry entirely embodied in a Wolfson product.

Wolfson’s products are not intended for use in life support systems, appliances, nuclear systems or systems where malfunction can reasonably be expected to result in personal injury, death or severe property or environmental damage. Any use of products by the customer for such purposes is at the customer’s own risk.

Wolfson does not grant any licence (express or implied) under any patent right, copyright, mask work right or other intellectual property right of Wolfson covering or relating to any combination, machine, or process in which its products or services might be or are used. Any provision or publication of any third party’s products or services does not constitute Wolfson’s approval, licence, warranty or endorsement thereof. Any third party trade marks contained in this document belong to the respective third party owner.

Reproduction of information from Wolfson datasheets is permissible only if reproduction is without alteration and is accompanied by all associated copyright, proprietary and other notices (including this notice) and conditions. Wolfson is not liable for any unauthorised alteration of such information or for any reliance placed thereon.

Any representations made, warranties given, and/or liabilities accepted by any person which differ from those contained in this datasheet or in Wolfson’s standard terms and conditions of sale, delivery and payment are made, given and/or accepted at that person’s own risk. Wolfson is not liable for any such representations, warranties or liabilities or for any reliance placed thereon by any person.

ADDRESS:

Wolfson Microelectronics plc
Westfield House
26 Westfield Road
Edinburgh
EH11 2QB
United Kingdom
Tel :: +44 (0)131 272 7000
Fax :: +44 (0)131 272 7001
Email :: apps@wolfsonmicro.com