

85-0459

Title: BOARD, DEMO, A4987ES

Originator: Joyce Roche

DESIGN COVER SHEET ROHS COMPLIANT PCB

1/27/2010

Page 1 of 1

			Design Rev >	OI	A						
Doc	Size	Format	Name, Description	Sub - Document Rev							
000-ASY	A	PDF	PCB Assembly Drawing	1	2						
000-BOM	A	PDF	Bill of Materials	1	1						
000-SCH	A	PDF	Schematic	1	2						
001-FAB	N/A	ZIP	PCB Fabrication files	1	2						
001-BLD	A	ZIP	PCB Assembly Build	1	2						

ALL COMPONENTS MUST BE ROHS COMPLIANT.

USE LEAD FREE SOLDER

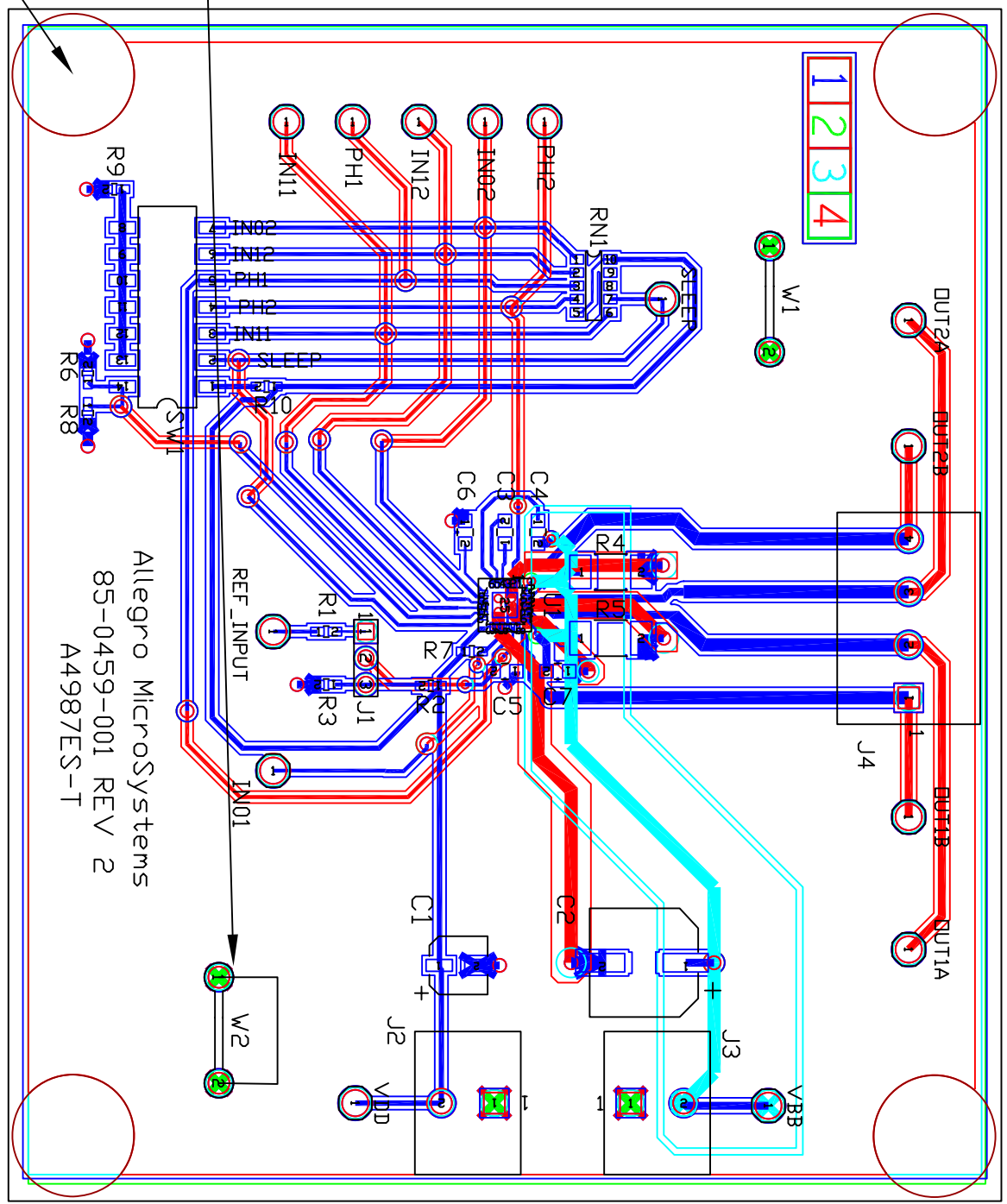
VIEW IS TOP SILKSCREEN

THIS BOARD HAS 4 LAYERS

U1 THERMAL PAD SHOULD BE SOLDERED DIRECTLY TO THE EXPOSED SURFACE ON THE PCB

MAKE W1 & W2 WIRES A FINISHED HEIGHT OF .25"-.4" FROM THE BOARD.

PLACE BUMPONS ON BOTTOM 4 CORNERS OF PC BOARD.



Allegro Microsystems
85-0459-001 REV 2
A4987ES-1



MicroSystems, Inc.
BDX 15036
WORCESTER, MA 01615-0036

TITLE BOARD, DEMO, A4987ES

DRAWING NO. 85-0459-000-ASY

DESIGNER Joyce Roche

DATE 1/27/10

SCALE NONE

SHEET 1 of 1

TOLERANCE UNLESS OTHERWISE SPECIFIED +/-

ALL COMPONENTS MUST BE ROHS COMPLIANT

Item	Qty	Part Reference	Value	Manufacturer	Manufacturer Number	Description	PCB Footprint
1	14	OUT1A,OUT1B, OUT2A,OUT2B, IN01, IN02, IN12, PH1, PH2, IN11, SLEEP, REF_INPUT, VDD,VBB	TP	Keystone Electronics	5010	TEST POINT, MULTIPURPOSE, THRU HOLE, RED	TP
2	1	C1	10uf	Panasonic - ECG	EEE-1EA100SR	CAP ELECT 10UF 25V VS SMD Case CodeC	smd200elec146
3	1	C2	47uf	Panasonic-ECG	EEE-1HA470P	CAP ELECT 47UF 50V VS SMD	smd400elec
4	3	C3,C4,C5	0.1uf	Kemet	C0805C104K3RACTU	CAP .10UF 25V CERAMIC X7R 0805	SMD0805
5	2	C7,C6	0.22uf	Taiyo Yuden	UMK212B7224KG-T	CAP CER .22UF 50V X7R 0805	SMD0805
6	1	J1	CON3	Samtec Inc.	TSW-103-07-G-S	Conn, Header, 3pos,.1" Sgl, Gold	header3
7	2	J2,J3	CON2	On Shore Technology	ED120/2DS	TERMINAL BLOCK 5.08MM VERT 2POS	tb-2sv-02
8	1	J4	CON4	On Shore Technology	ED120/4DS	TERMINAL BLOCK 5.08MM VERT 4POS	tb-2sv-04
9	1	RN1	4.7K	CTS Corporation Resistor/ Electrocomponents	745C101472JPTR	RES ARRAY 4.7K OHM 10TRM BSS SMD	SMD10P_126X50
10	1	R1	30K	Rohm	MCR03EZPFX3002	RES 30.0K OHM 1/10W 1% 0603 SMD	SMD0603
11	1	R2	20K	Rohm	MCR03EZPJ203	RES 20K OHM 1/10W 5% 0603 SMD	SMD0603
12	2	R3,R6	16.2K	Yageo	RC0603FR-0716K2L	RES 16.2K OHM 1/10W 1% 0603 SMD	SMD0603
13	2	R4,R5	0.56	Panasonic - ECG	ERJ-1TRQFR56U	RES .56 OHM 1W 1% 2512 SMD	SMD2512
14	1	R7	4.7K	Rohm	MCR03EZPJ472	RES 4.7K OHM 1/10W 5% 0603 SMD	SMD0603
15	1	R8	TBD			To Be Determined Do Not Kit Do Not Install	SMD0603
16	2	R9,R10	0 OHM	Yageo	RC0603JR-070RL	RES 0.0 OHM 1/10W 5% 0603 SMD	SMD0603

ALL COMPONENTS MUST BE ROHS COMPLIANT

Joyce Roche

Item	Qty	Part Reference	Value	Manufacturer	Manufacturer Number	Description	PCB Footprint
17	1	SW1	SW DIP 7	C&K Components	SD07H1SB	SWITCH DIP SPST SEALED 7POS SMD	smd_dip14_3
18	1	U1	A4987ES	Allegro MicroSystems	A4987SES	DMOS Dual Full-Bridge PWM Motor Driver with Overcurrent Protection	qfn25l-4x4-50p
19	1	PCB	85-0459-001			A4987ES-T, Printed Circuit Board, ROHS	
20	4		Bumpons	3m/ESM	SJ5003	Bumpon, Hemisphere, Black Place on bottom 4 corners of PC board	
21	2	W1, W2	GND BUS	any	any	20 AWG Solid Bus Wire, about 1"long Finished height of .25"-.4" from board	tp4
22	1	for J1	Shunt	Sullins Electronics	STC02SYAN	CONN,JUMPER SHORTING TIN PLACE BETWEEN PINS 1 AND 2	

Replacement for capacitors and resistors must be equivalent to listed component.

