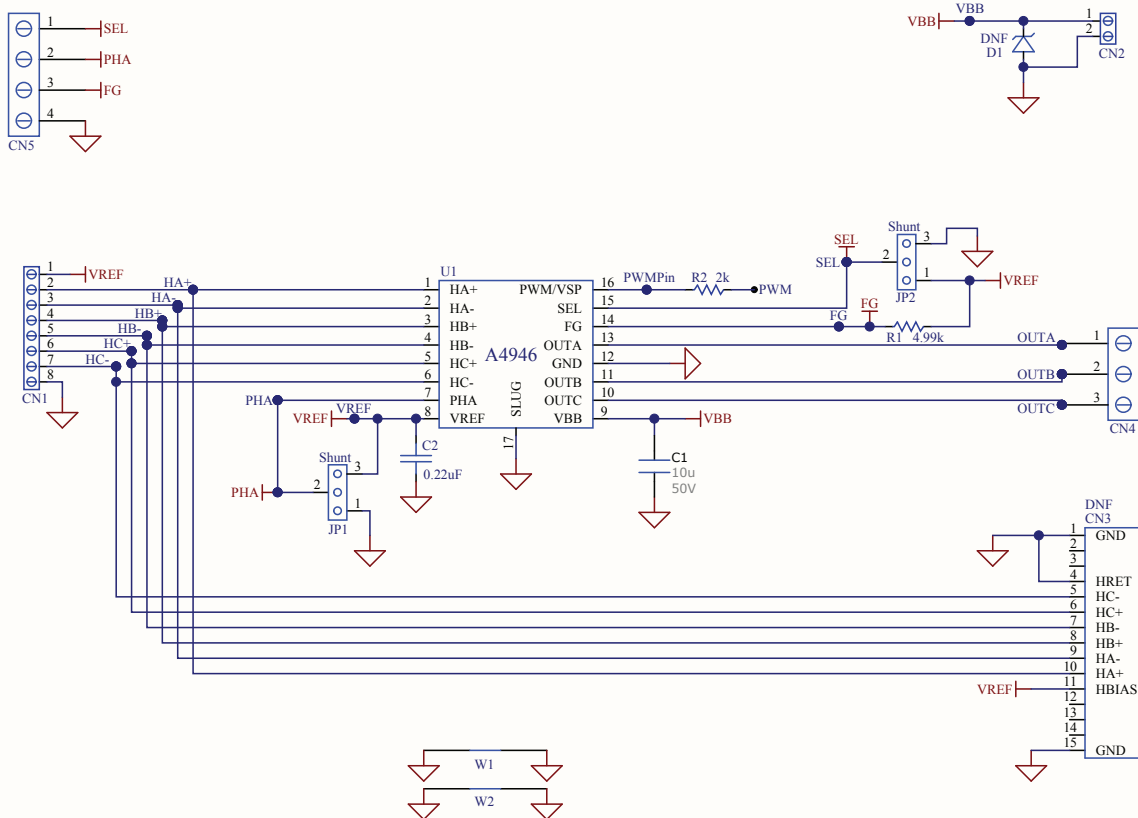
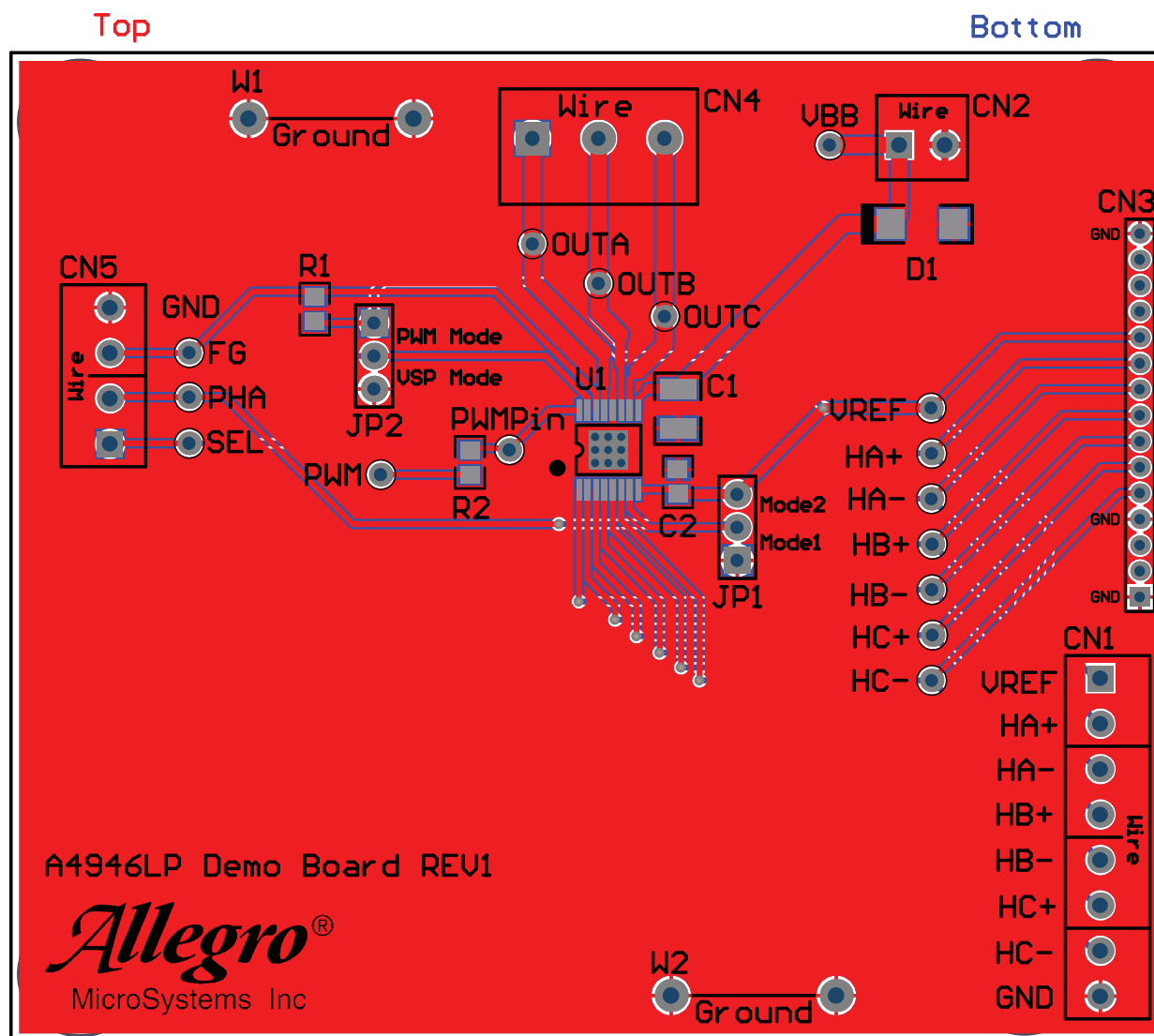


Demo Board Schematic/Layout

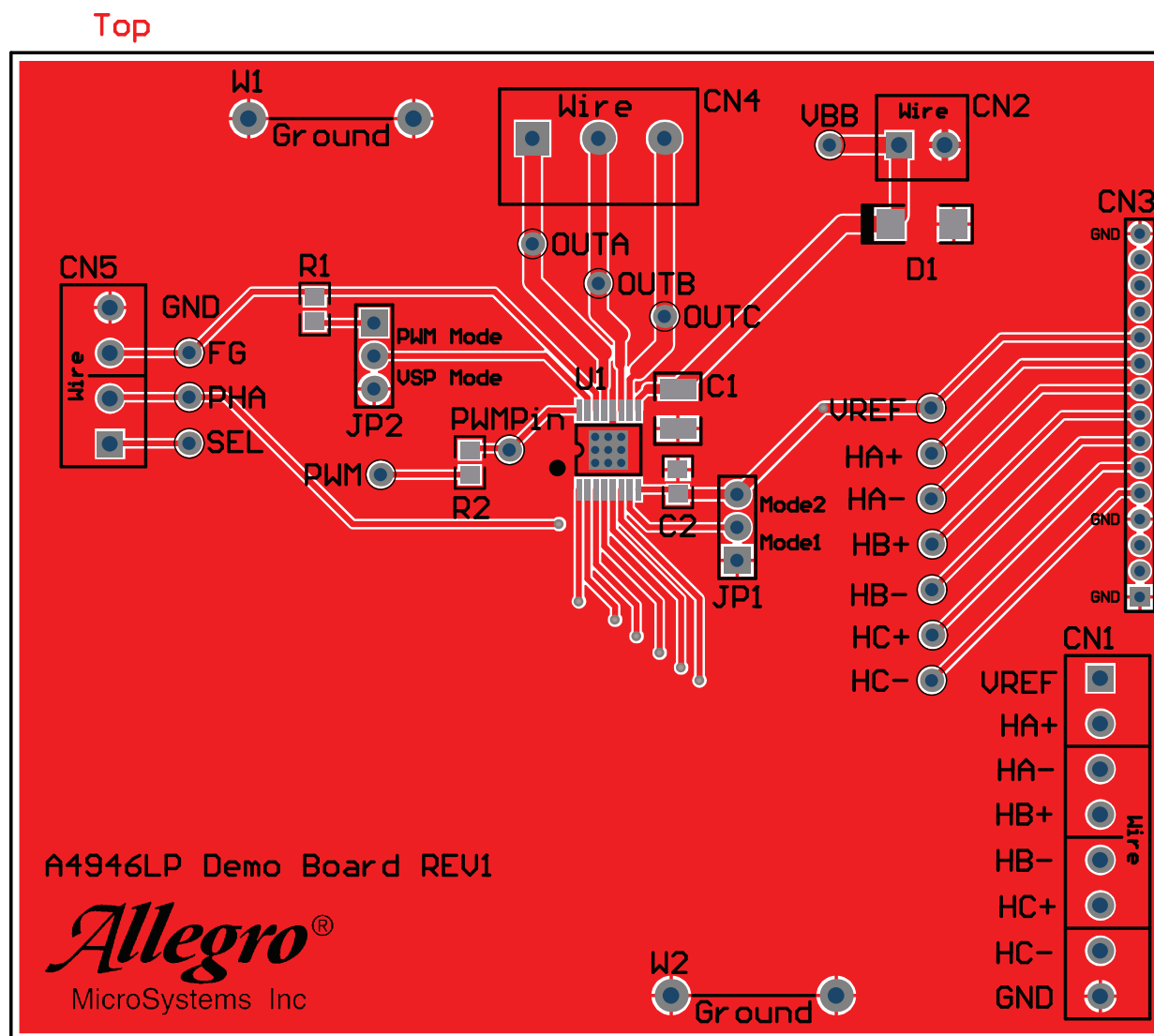
SCHEMATIC



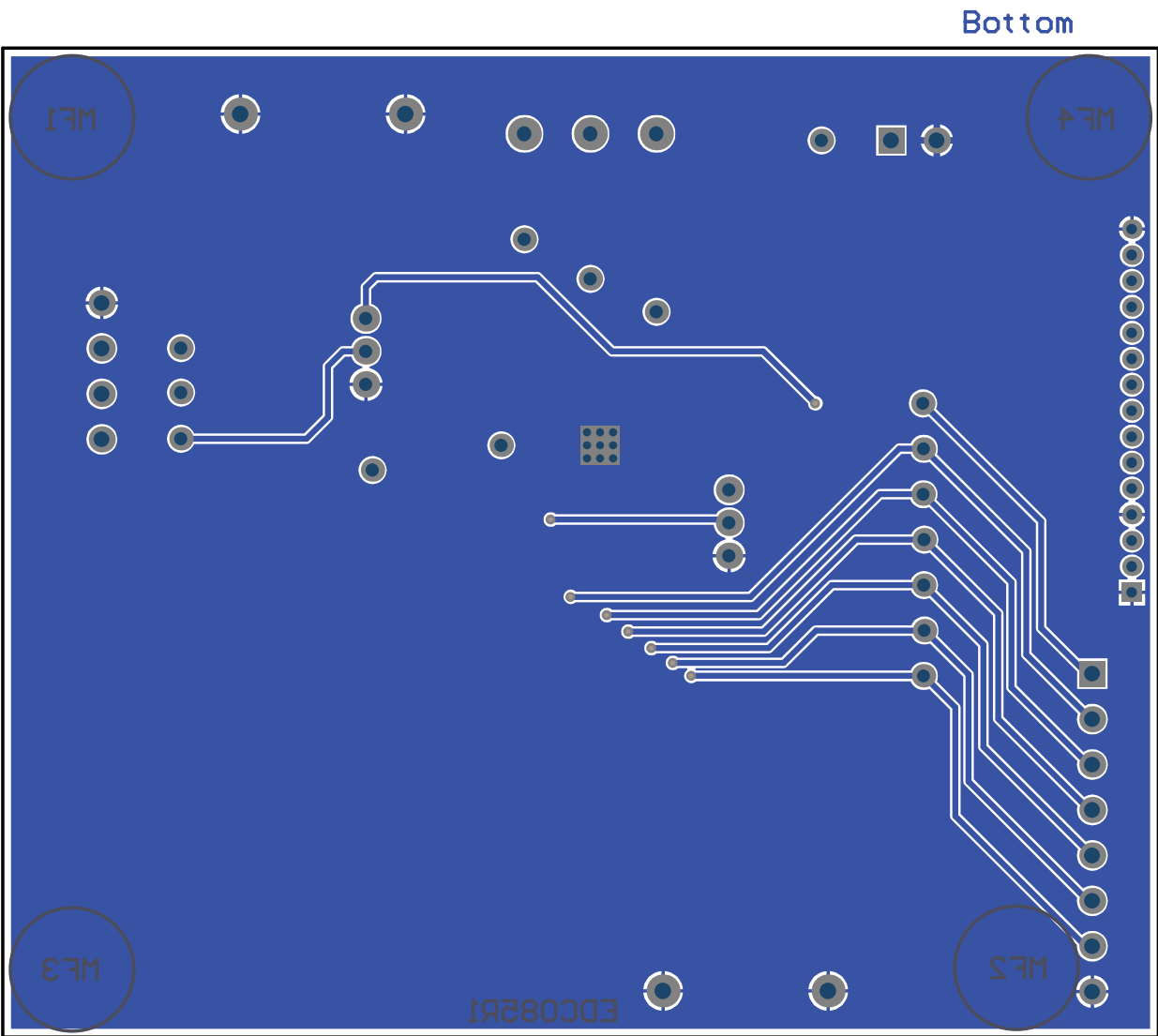
LAYOUT



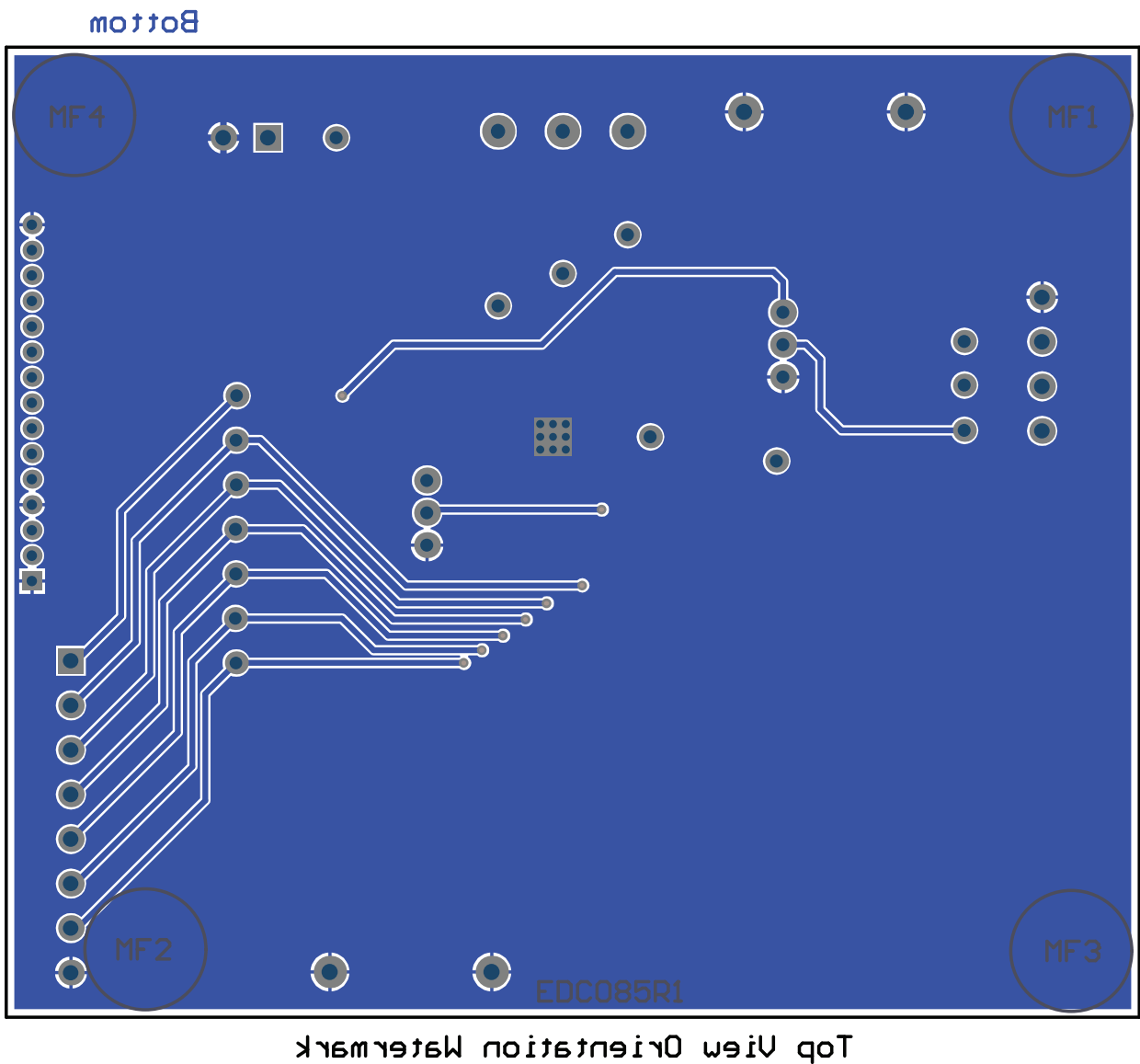
Top View Orientation Watermark



Top View Orientation Watermark



Top View Orientation Watermark



BILL OF MATERIALS

Item	Qty	Designator	Value	Description	Footprint	PartType; DigiKey	RS	Farnell	Assy
1	1	C1	10uF	50V SMT Ceramic Capacitor (X7R/X7S)	1210	\	740-7795	2112728	\
2	1	C2	0.22uF	16V SMT Ceramic Capacitor (X7R)	0805	Digikey 445-1355-1-ND	723-6114	1759149	\
3	7	CN1, CN2, CN5	\	2-Pin 3.5mm Pitch Screw Connector	2-Pin 3.5mm	On Shore ED555/2DS; Digikey ED1514-ND	467-0259	\	\
4	1	CN3	\	15-Pin 2mm Pitch Single Row Header	15-Pin 2mm	Sullins NRPN151PAEN-RC; Digikey S5800-15-ND	\	\	DNF
5	1	CN4	\	3-Pin 5.08mm Pitch Screw Connector	3-Pin 5.08mm	On Shore ED120/3DS; Digikey ED1610-ND	325-8736	1131856	\
6	1	D1	\	TVS Zener	DO-214AA	Littelfuse SMBJ16A; Digikey SMBJ16ALFCT-ND	\	\	DNF
7	16	FG, HA+, HA-, HB+, HB-, HC+, HC-, OUTA, OUTB, OUTC, PHA, PWM, PWMPin, SEL, VBB, VREF	\	Mini Test Point, Red	1mm Dia Hole	Keystone 5000; Digikey 5000K-ND	262-2185	8731144	\
8	4	MF1, MF2, MF3, MF4	\	Mount Foot		3M SJ-5303 (CLEAR); Digikey SJ5303-7-ND	\	1165068	\
9	2	JP1, JP2	\	Cut from 50-Pin strip (DigiKey part)	3-Pin Jumper	Samtec TSW-150-07-T-S; Digikey SAM1035-50-ND	251-8092	1022249	\
10	1	R1	4.99k	1/8W Resistor	0805	Panasonic ERJ-6ENF4991V; Digikey P4.99KCCT-ND	\	2057625	\
11	1	R2	2k	1/8W Resistor	0805	Panasonic ERJ-6GEYJ202V; Digikey P2.0KACT-ND	721-7772	2057613	\
12	1	U1	\	3-Phase Fan Driver	eTSSOP16	A4946LP	\	\	DNF
13	2	W1, W2	\	22 Gauge Tinned Copper wire	Scope Ground	\	355-079	1230993	\
14	1	PCB	\	EDC085R1	\	\	\	\	\
15	2	\	\	Jumper Shorting Link, Red	2.54mm Pitch	\	251-8531	150411	\
16	1	\	\	ESD Bag 152x203mm (6x8")	\	\	287-7739	4921197	\

BOARD BUILD INSTRUCTIONS:

- (x) Note: (Assy column) "DNF" = Do No Fit (component not fitted).
- (x) Note: Capacitor order code part volt ratings may be higher than minimum design rating stated.
- (x) PCB to have a smooth routed finish with no breakout 'lugs' remaining.
- (x) Ground bar = 20swg Tinned Copper Wire, Approx 10mm Height, Square Corner Formed (see pic):-
- (x) Paste mask reflow soldering process to be used (for SMT) rather than hand soldering, unless otherwise agreed.
- (x) Final 'active' stage = board wash (no flux present on finished boards, for cosmetic reasons).
- (x) No manufacturer stick-on label's on topside of pcb, if required - bottom side only.
- (x) Jumper shorting link = Fit x2 per board.
- (x) Rubber Feet = Fit x4 per board (positions marked on bottom silkscreen).
- (x) Please do NOT seal the ESD bags for shipping (adhesive label or heat seal), just fold bag over to close.

Revision History

Number	Date	Description
–	September 7, 2016	Initial release

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