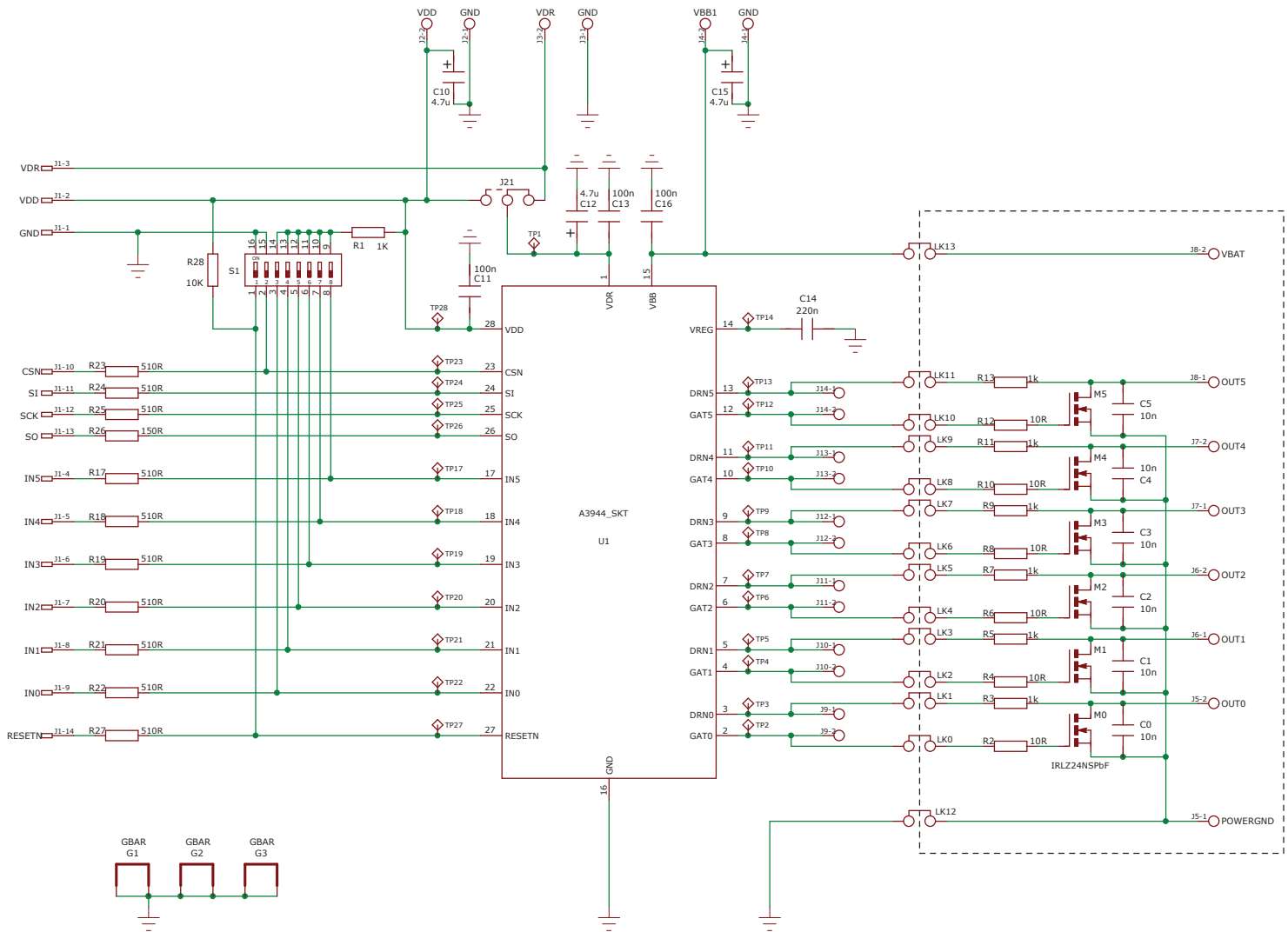
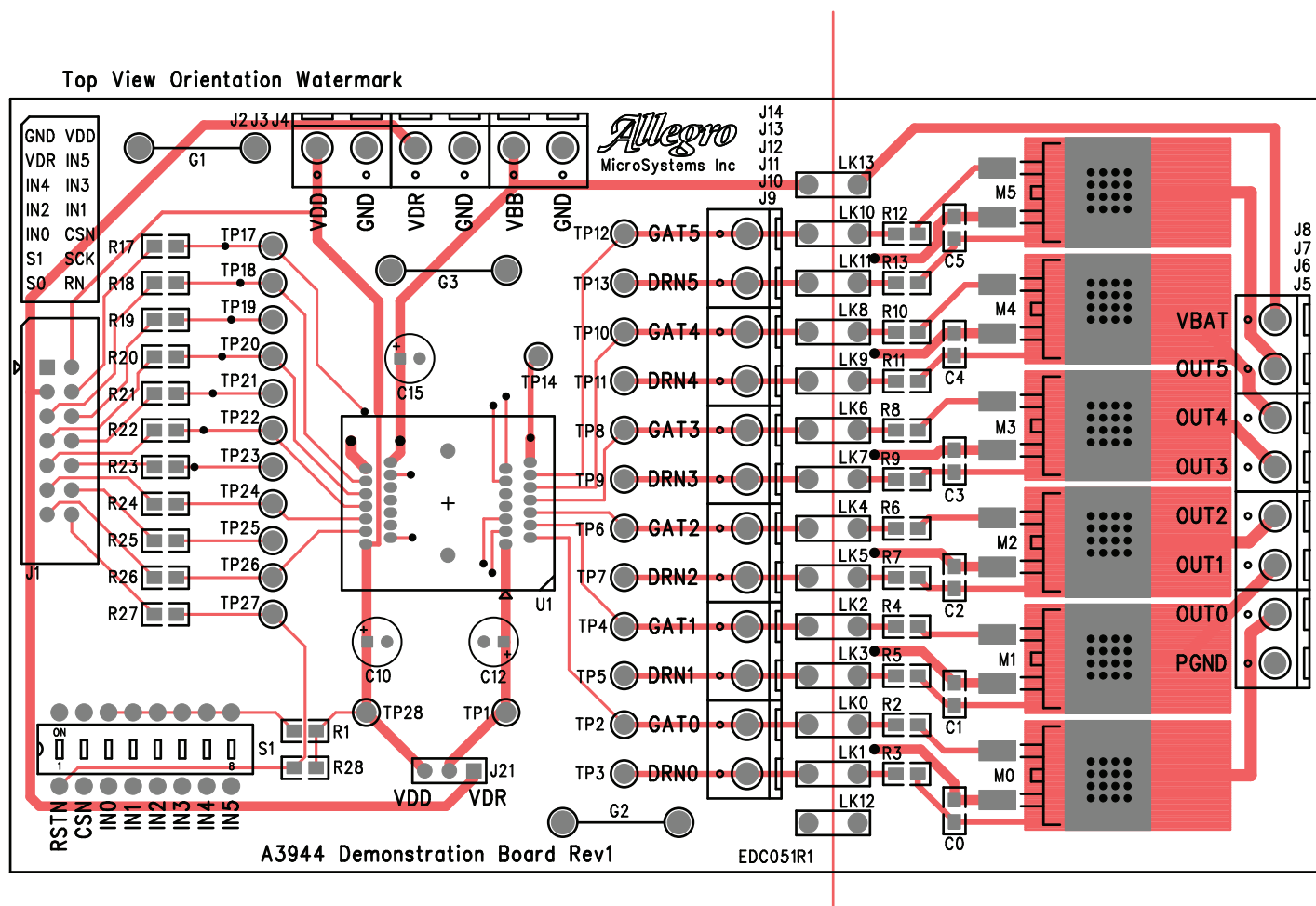


Demo Board Schematic/Layout

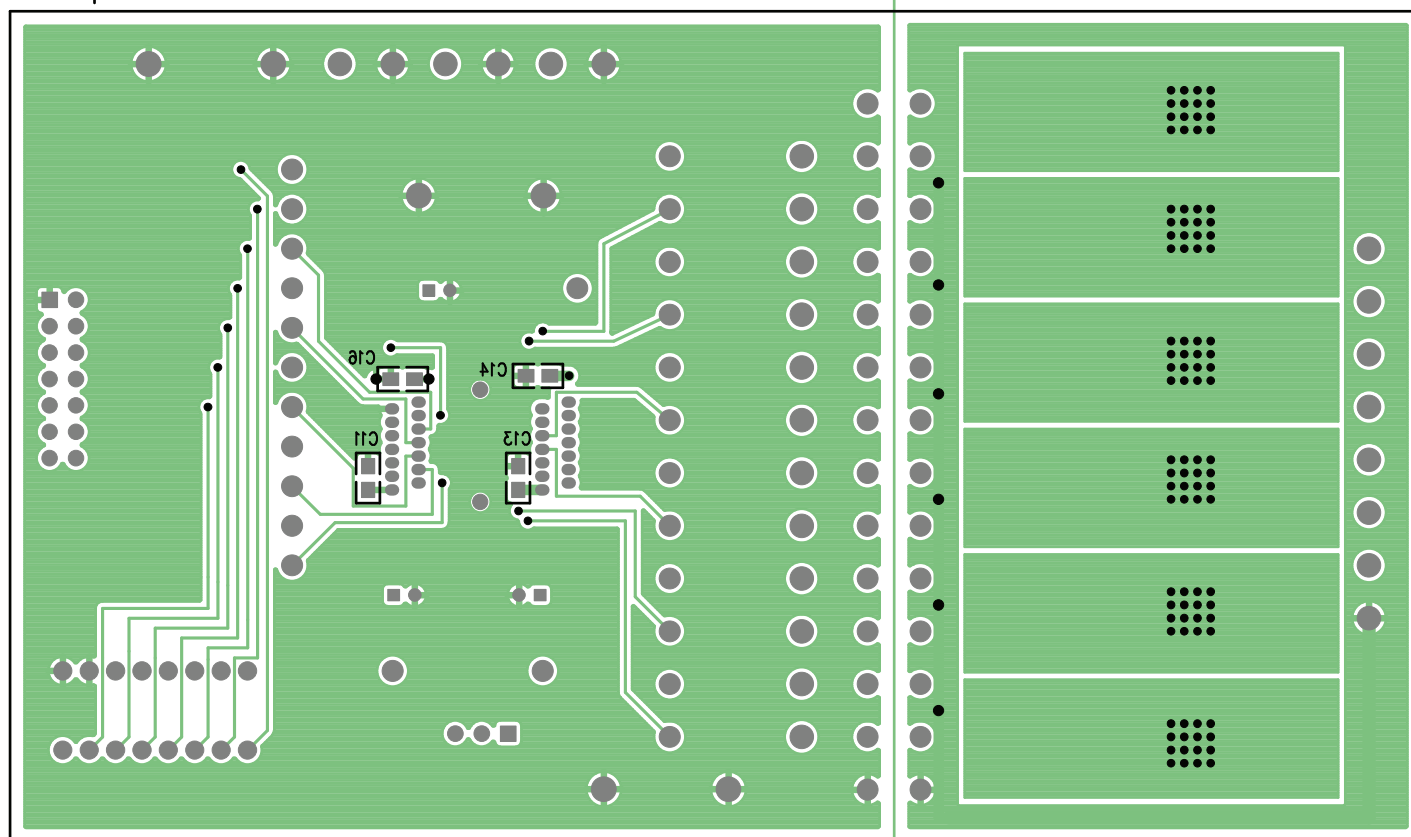
SCHEMATIC

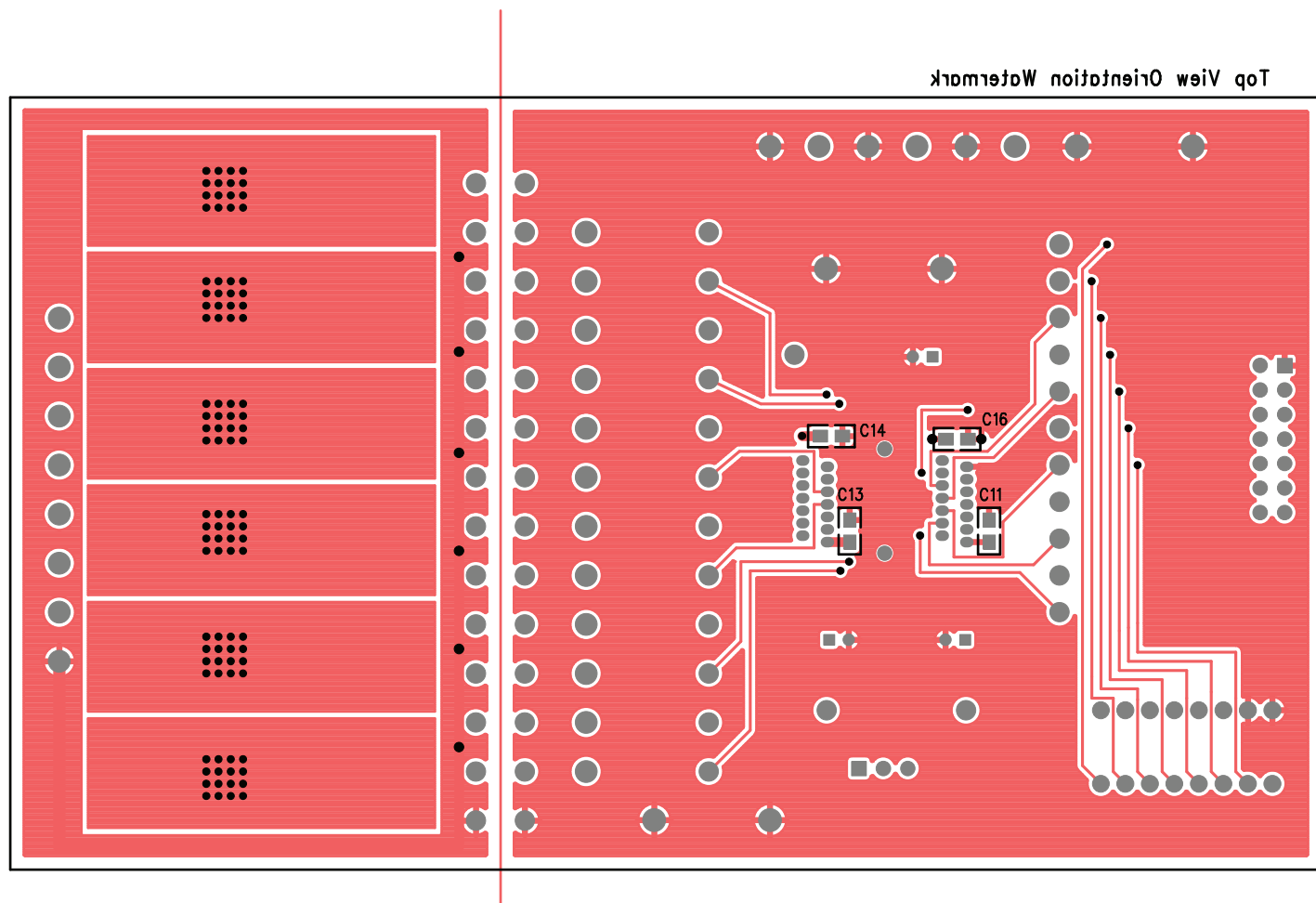


LAYOUT



Top View Orientation Watermark





BILL OF MATERIALS

A3944 Demonstration Board Rev1 Component List (EDC051R1)						
Part	Value/Part	Package	Description	Qty	RS #	Farnell #
C0 - C5	10nF	0805	Ceramic Chip Cap, >=100V, X7R	6	391-012	
C10, C12	4.7uF	2mm Pitch, 5mm D, 5mm L	Alu Electrolytic Cap, >=10V	2	228-7063	
C11, C13	100nF	0805	Ceramic Chip Cap, >=10V, X7R	2	264-4416	
C14	220nF	0805	Ceramic Chip Cap, >=25V, X7R	1	220-8032	
C15	4.7uF	2mm Pitch, 5mm D, 5mm L	Alu Electrolytic Cap, >=50V (Prefer 100V)	1	228-7063	
C16	100nF	0805	Ceramic Chip Cap, >=50V, X7R (Prefer 100V)	1	698-3361	
G1 - G3	\	1.2mm Hole Pairs, 12mm Pitch	Ground Bar, 20swg Tinned Copper Wire	3	355-063	
J1	\	2x7 pins, 100mils Pitch	IDC Ribbon Header, 14Pin Double Row	1	542-8807	
J2 - J14	\	2x1.2mm, 200mils Pitch	Screw Terminal, 2-way	13	425-8720	
J21	\	3x1mm Holes, 2.54mm Pitch	Jumper Header, 3-way	1	251-8092	
LK0 - LK14	\	2x1mm Holes, 2.54mm Pitch	Link, Tinned Copper Wire, 22swg	15	355-079	
M0 - M5	IRLZ24NSPbF	TO-263 (D2PAK)	MOSFET-N, 55V, 18A	6	543-0608	1013482
M0 - M5 alternative	IRLZ44NSPbF	TO-263 (D2PAK)	MOSFET-N, 55V, 47A	6	543-0620	8651426
PCB	EDC051R1	\	Demonstration Board, 2 layer, 1.6mm, FR4	1	\	
R1, R3, R5, R7, R9, R11, R13	1k	0805	SM chip resistor	7	618-3583	
R2, R4, R6, R8, R10, R12	10R	0805	SM chip resistor	6	223-0152	
R17 - R25, R27	510R	0805	SM chip resistor	10	618-1470	
R26	150R	0805	SM chip resistor	1	223-0310	
R28	10k	0805	SM chip resistor	1	618-5163	
S1	\	DIL16, 2.54mm Pitch	8-Pole DIP Switch	1	342-118	
TP1 - TP28	\	1mm Hole	Test Terminals, Red	28	262-2185	
U1	\	eTSSOP28 socket	A3944 socket, Enplas OTS-28-0.65-01	1	\	
@J21	\	\	Jumper Shorting Link, Red	1	251-8531	
@PCB	\	\	Rubber Feet	4	388-7030	

BOARD BUILD NOTES:-

- (1) Jumper shorting link = Fit x1 per board.
- (2) Ground bar = 20swg Tinned Copper Wire, Approx 10mm Height, Square Corner Formed (see pic) :-
- (3) Rubber Feet = Fit x4 per board, one in each corner (as near as possible).
- (4) Final 'active' stage = board wash (no flux present on finished boards).
- (5) No manufacturer stick-on label's on topside of pcb, bottom side only.
- (6) PCB to have a smooth routed finish with no breakout 'lugs' remaining.
- (7) Paste mask reflow soldering process to be used rather than hand soldering, unless otherwise agreed.



Revision History

Number	Date	Description
–	September 9, 2016	Initial release

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