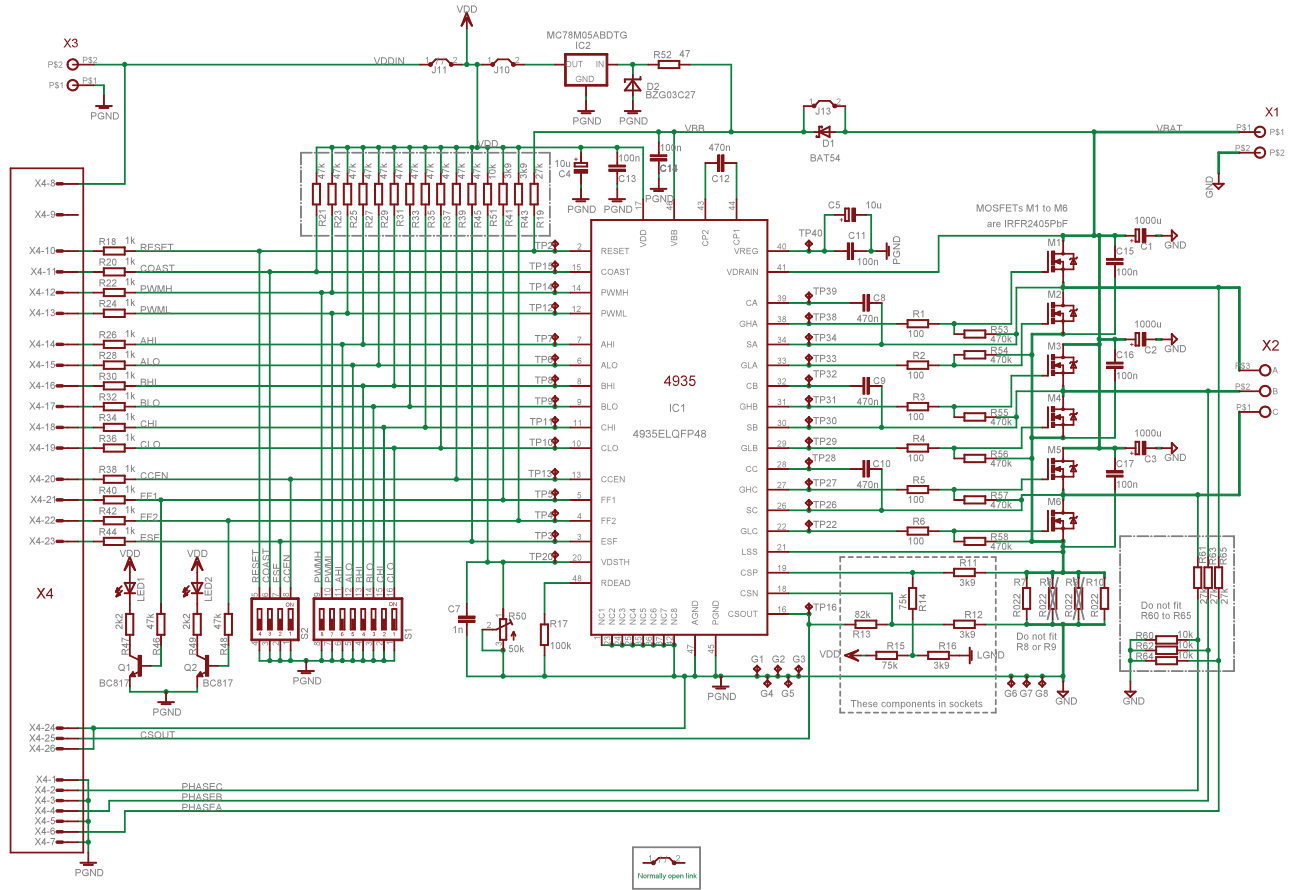
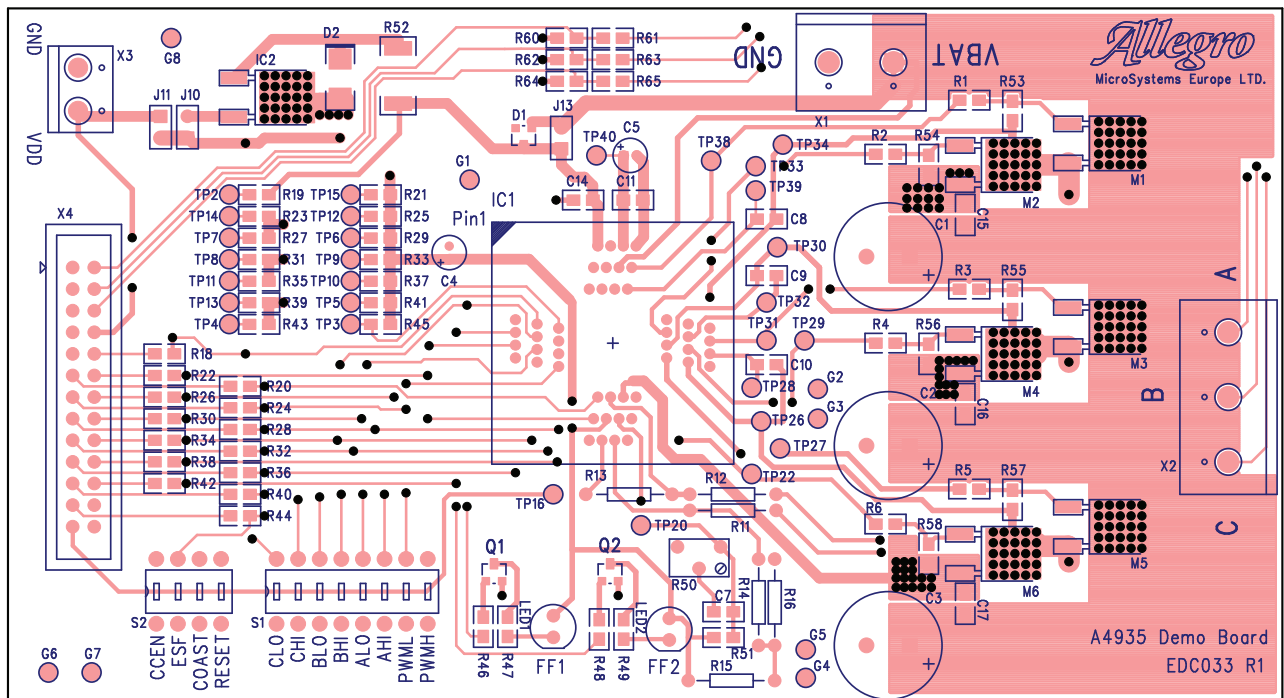


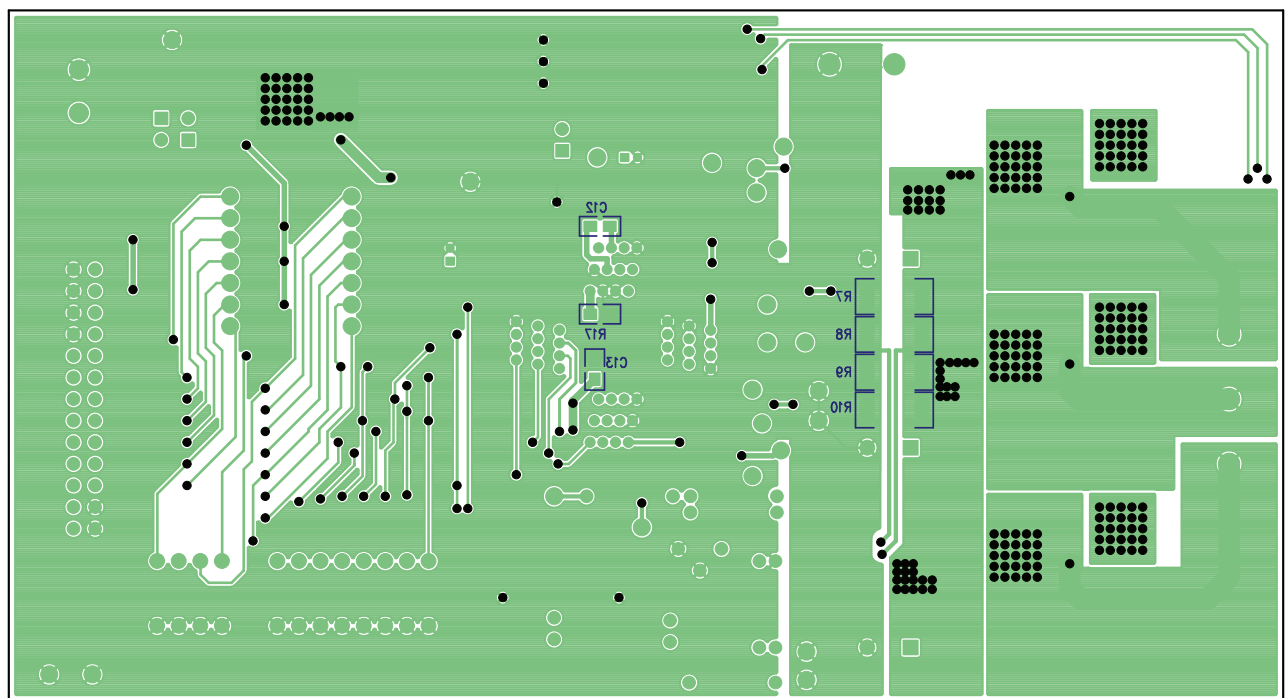
Demo Board Schematic/Layout

SCHEMATIC



LAYOUT





BILL OF MATERIALS

A4935 Demo Board Rev 1 Component List					All parts RoHS Compliant				
Part	Value	Package	Description	RS Part	Part	Value	Package	Description	RS Part
C1	1000uF	12.5mm, 5mm pitch	Alu, Min, Elytic, >50V, 105C	365-4329	R1	100R	0805	Chip Resistor	223-0297
C2	1000uF	12.5mm, 5mm pitch	Alu, Min, Elytic, >50V, 105C	365-4329	R2	100R	0805	Chip Resistor	223-0297
C3	1000uF	12.5mm, 5mm pitch	Alu, Min, Elytic, >50V, 105C	365-4329	R3	100R	0805	Chip Resistor	223-0297
C4	10uF	4mm dia, 1.5mm pitch	Alu, Elytic, >16V 105C	414-9008	R4	100R	0805	Chip Resistor	223-0297
C5	10uF	4mm dia, 1.5mm pitch	Alu, Elytic, >16V 105C	414-9008	R5	100R	0805	Chip Resistor	223-0297
C7	1nF	0805	Ceramic Chip Cap >16V X7R	211-3552	R6	100R	0805	Chip Resistor	223-0297
C8	470nF	0805	Ceramic Chip Cap >25V X5R	220-7988	R7	R022	2512 6.4x3.2mm	1W Chip Resistor	294-5602
C9	470nF	0805	Ceramic Chip Cap >25V X5R	220-7988	R10	R022	2512 6.4x3.2mm	1W Chip Resistor	294-5602
C10	470nF	0805	Ceramic Chip Cap >25V X5R	220-7988	R17	100k	0805	Chip Resistor	223-0691
C11	100nF	0805	Ceramic Chip Cap >35V X5R	237-7100	R18	1k	0805	Chip Resistor	223-0427
C12	470nF	0805	Ceramic Chip Cap >16V X5R	220-7988	R19	27k	0805	Chip Resistor	223-0613
C13	100nF	0805	Ceramic Chip Cap >16V X5R	237-7100	R20	1k	0805	Chip Resistor	223-0427
C14	100nF	0805	Ceramic Chip Cap >50V X5R	237-7100	R21	47k	0805	Chip Resistor	223-0641
C15	100nF	0805	Ceramic Chip Cap >50V X5R	237-7100	R22	1k	0805	Chip Resistor	223-0427
C16	100nF	0805	Ceramic Chip Cap >50V X5R	237-7100	R23	47k	0805	Chip Resistor	223-0641
C17	100nF	0805	Ceramic Chip Cap >50V X5R	237-7100	R24	1k	0805	Chip Resistor	223-0427
D1	BAT54	SOT23	Schottky Diode 0.2A 30V	436-7818	R25	47k	0805	Chip Resistor	223-0641
D2	BZG03C27	SMA (DO214)	27V 3W Zener Diode	245-6310	R26	1k	0805	Chip Resistor	223-0427
J10	Short	2.54mm	Jumper 2.54mm	251-8503	R27	47k	0805	Chip Resistor	223-0641
J11	Open	2.54mm	Jumper 2.54mm	251-8503	R28	1k	0805	Chip Resistor	223-0427
J13	Short	2.54mm	Jumper 2.54mm	251-8503	R29	47k	0805	Chip Resistor	223-0641
LED1		3mm	LED Red 20mA	826-739	R30	1k	0805	Chip Resistor	223-0427
LED2		3mm	LED Red 20mA	826-739	R31	47k	0805	Chip Resistor	223-0641
M1	IRFR2405PbF	DPAK (TO252AA)	MOSFET	543-2222	R32	1k	0805	Chip Resistor	223-0427
M2	IRFR2405PbF	DPAK (TO252AA)	MOSFET	543-2222	R33	47k	0805	Chip Resistor	223-0641
M3	IRFR2405PbF	DPAK (TO252AA)	MOSFET	543-2222	R34	1k	0805	Chip Resistor	223-0427
M4	IRFR2405PbF	DPAK (TO252AA)	MOSFET	543-2222	R35	47k	0805	Chip Resistor	223-0641
M5	IRFR2405PbF	DPAK (TO252AA)	MOSFET	543-2222	R36	1k	0805	Chip Resistor	223-0427
M6	IRFR2405PbF	DPAK (TO252AA)	MOSFET	543-2222	R37	47k	0805	Chip Resistor	223-0641
Q1	BC817	SOT223	NPN Bipolar Transistor	484-2252	R38	1k	0805	Chip Resistor	223-0427
Q2	BC817	SOT223	NPN Bipolar Transistor	484-2252	R39	47k	0805	Chip Resistor	223-0641
S1	8-Way	DIL-16	8-pole DIP Switch	342-118	R40	1k	0805	Chip Resistor	223-0427
S2	4-Way	DIL-8	4-pole DIP Switch	342-102	R41	3k9	0805	Chip Resistor	223-0506
X1		7.62mm	Pheonix 2-way Srew terminal	189-5966	R42	1k	0805	Chip Resistor	223-0427
X2		7.62mm	Pheonix 3-way Srew terminal	189-5972	R43	3k9	0805	Chip Resistor	223-0506
X3		5.08mm	Pheonix 2-way Srew terminal	425-8720	R44	1k	0805	Chip Resistor	223-0427
X4		26-pin	3M 26-way connector	542-9030	R45	47k	0805	Chip Resistor	223-0641
IC1	A4935	eLQFT48 in socket	Wells P/N 7007-048-X-07		R46	47k	0805	Chip Resistor	223-0641
IC2	MC78M05ABDTG	D-PAK	5V Regulator	516-5922	R47	2k2	0805	Chip Resistor	223-0477
PCB	EDC033R1				R48	47k	0805	Chip Resistor	223-0641
					R49	2k2	0805	Chip Resistor	223-0477
					R50	50k	6mm	Multiturn Cermet Trim Resistor	521-9293
					R51	10k	0805	Chip Resistor	223-0562
					R52	47R	2512	Chip Resistor 1W	224-0222
					R53	470k	0805	Chip Resistor	223-0786
					R54	470k	0805	Chip Resistor	223-0786
					R55	470k	0805	Chip Resistor	223-0786
					R56	470k	0805	Chip Resistor	223-0786
					R57	470k	0805	Chip Resistor	223-0786
					R58	470k	0805	Chip Resistor	223-0786
Add Sense Amp resistors if required					Add Phase Voltage Potential Divider if required for bmf sensing				
R11	3k9	Axial (Socket)	Metal Film	148-641	R60	10k	0805	Chip Resistor	223-0562
R12	3k9	Axial (Socket)	Metal Film	148-641	R61	27k	0805	Chip Resistor	223-0613
R13	82k	Axial (Socket)	Metal Film	148-950	R62	10k	0805	Chip Resistor	223-0562
R14	75k	Axial (Socket)	Metal Film	148-944	R63	27k	0805	Chip Resistor	223-0613
R15	75k	Axial (Socket)	Metal Film	148-944	R64	10k	0805	Chip Resistor	223-0562
R16	3k9	Axial (Socket)	Metal Film	148-641	R65	27k	0805	Chip Resistor	223-0613
Add Test Points if required					Add Additional Sense Resistors for Higher Currents				
TPx, Gx		1mm PCB Hole	Test Terminal	262-2179					
R8	R022	2512 6.4x3.2mm	1W Chip Resistor	294-5602					
R9	R022	2512 6.4x3.2mm	1W Chip Resistor	294-5602					

Revision History

Number	Date	Description
–	September 7, 2016	Initial release

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