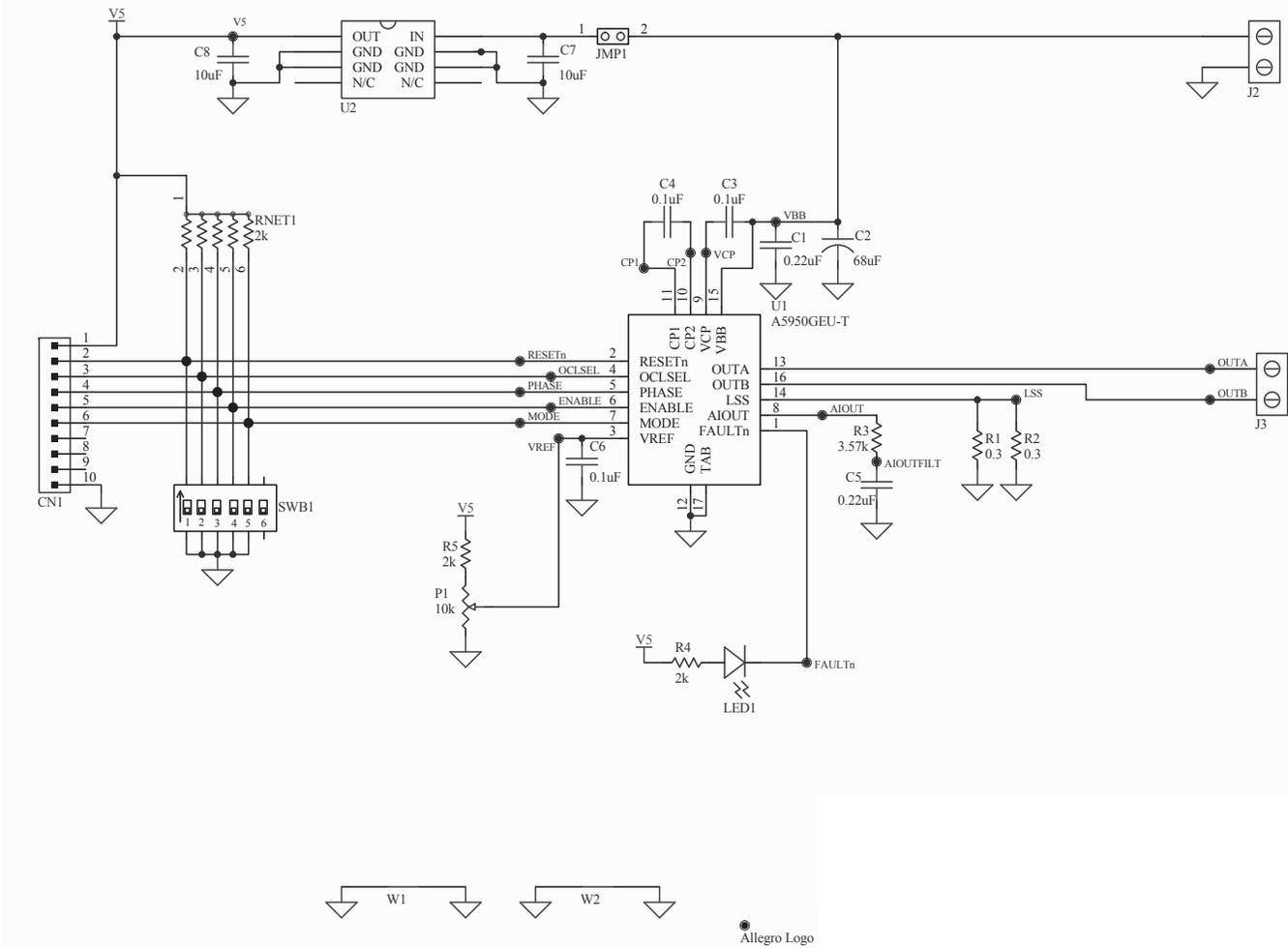


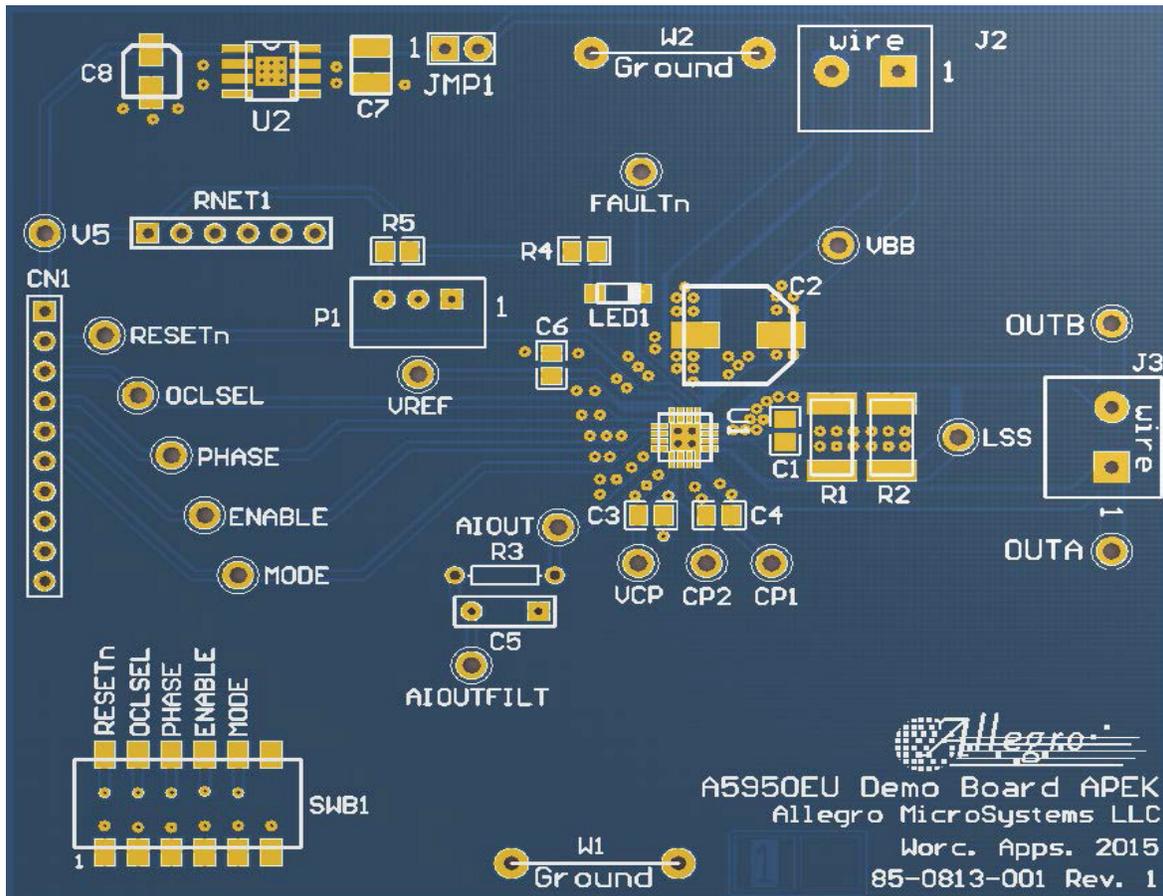
## Demo Board Schematic/Layout

### SCHEMATIC



## LAYOUT

Clear Bumpon feet to be installed at the four corners of the board on the bottom side.  
W1 and W2 are to be installed so that there is ~0.3" loop on the top of the board.  
Board MUST be RoHS compliant.



## BILL OF MATERIALS

Item	Quantity	Designator	value	Description	PartType	Footprint
1	17	AIOUT, AIOUTFILT, CP1, CP2, ENABLE, FAULTn, LSS, MODE, OCLSEL, OUTA, OUTB, PHASE, RESETn, V5, VBB, VCP, VREF		Large Test Point	Keystone Electronics 5010; Digikey 5010K-ND	PAD 57 125 TP HB
2	1	C1	0.22uF	50V Capacitor	Murata GCM21BR71H224KA37L; Digikey 490-4970-1-ND	0805
3	1	C2	68uF	50V Capacitor	Chemi-Con HHXA500ARA680MHA0G; Digikey 565-4168-1-ND	UCC HA0
4	3	C3, C4, C6	0.1uF	50V Capacitor	TDK C2012X7R1H104K085AA; Digikey 445-7534-1-ND	0805
5	1	C5	0.22uF	16V Capacitor	TDK FK28X7R1C224K; Digikey 445-2849-ND	0.2" Cap
6	1	C7	10uF	50V Capacitor	Taiyo Yuden UMK325BJ106KM-T; Digikey 587-2247-1-ND	1210
7	1	C8	10uF	16V Capacitor	Chemi-Con EMZA160ADA100MD61G; Digikey 565-2534-1-ND	UCC D61 Cap
8	12 Pins	CN1, JMP1		10-Pin Male Header (Cut from 50-Pin Strip), Cut pins from 50-pin strip.	Samtec TSW-150-07-T-S; Digikey SAM1035-50-ND	2-pos. shunt, 10pinUSBConn
9	4			Bumpom Foot	3M SJ-5303 (CLEAR); Digikey SJ5303-7-ND	Bumpom Foot
10	2	J2, J3		2-Pin Screw Down Connector	On Shore Technology ED120/2DS; Digikey ED1609-ND	2-pin screw down connector2
11	1	LED1		Red Surface-mount LED	Lite-On LTST-C150CKT; Digikey 160-1167-1-ND	1206 LED
12	1	P1	10k	1/2W Potentiometer	Bourns 3299W-1-103LF; Digikey 3299W-103LF-ND	Through-hole Trimpot
13	1			pcb	85-0813-001 Rev. 1	
14	4 Positions			Sockets for R3 and C5 (Cut from 64 position strip).	Mill-Max 310-43-164-41-001000; Digikey ED6264-ND	
15	2	R1, R2	0.3	1W Resistor	Yageo RL2512FK-070R3L; Digikey 311-0.3TCT-ND	2512 (6432 Metric)
16	1	R3	3.57k	1/2W Resistor	Vishay-Dale CMF553K5700FHCB; Digikey CMF3.57KHFCT-ND	AXIAL-0.3
17	2	R4, R5	2k	1/8W Resistor	Panasonic ERJ-6GEYJ202V; Digikey P2.0KACT-ND	0805
18	1	RNET1	2k	5 Bussed 2k Resistors	Bourns 4606X-101-202LF; Digikey 4606X-1-202LF-ND	6-Pin 0.1" Connector - duplicate
19	1	SWB1		6-Position SPST Switches	C&K Components SDA06H0SBR; Digikey CKN9495CT-ND	SDA06H0SB
20	1	U1		DC Motor Driver	A5950GEU-T	EU-16
21	1	U2	5V	Linear Voltage Regulator	National LM2936HVMA-5.0/NOPB; Digikey LM2936HVMA-5.0/NOPB-ND	LM2936HVMA
22	2	W1, W2		22 Gauge Buss Wire (300mils above pcb)		Scope Ground

## Revision History

Number	Date	Description
–	January 12, 2017	Initial release

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