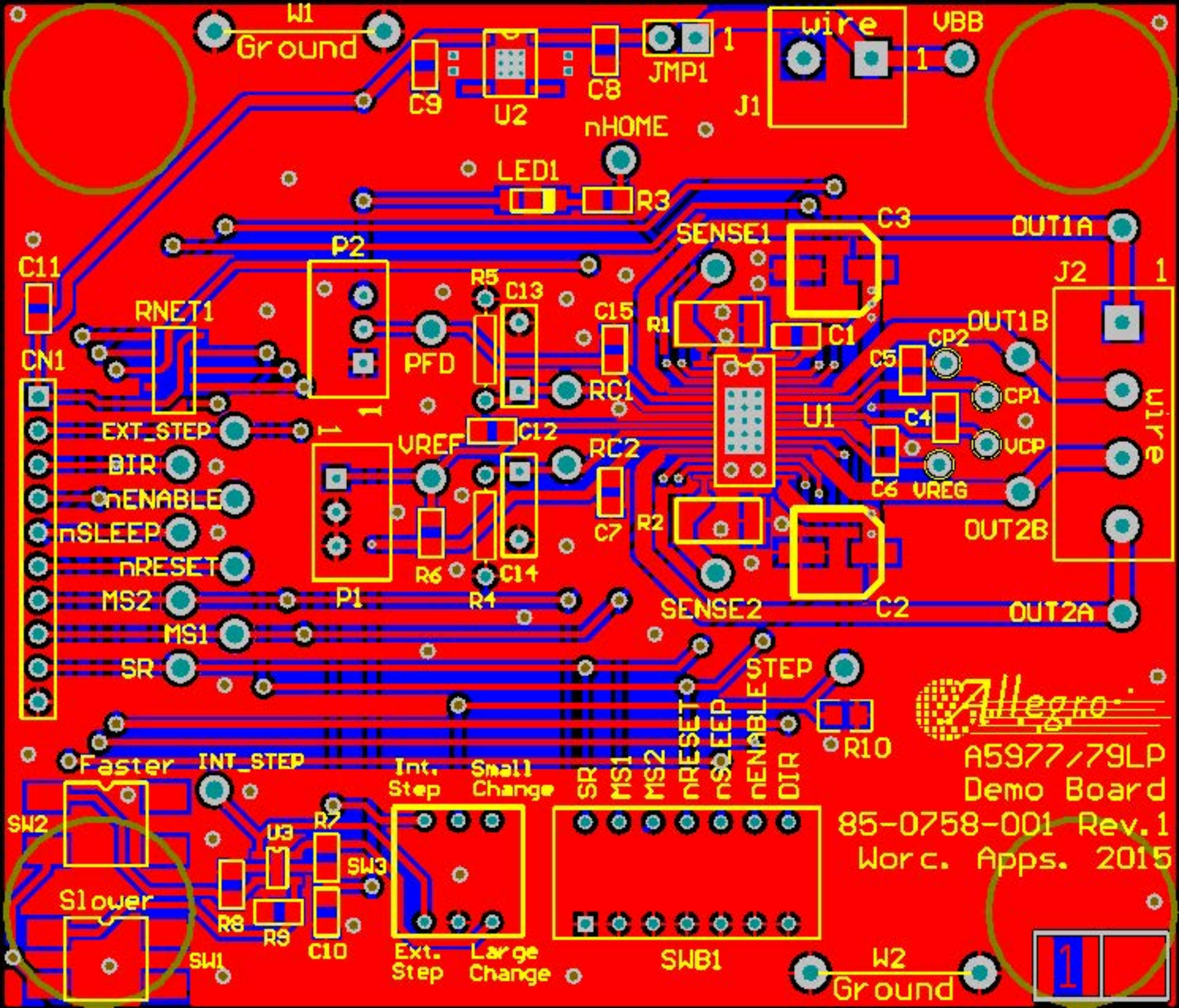


Title		
A5979LP Demo Board APEK		
Size	Number	Revision
A	85-0759-000-SCH	1
Date:	6/22/2015	Sheet 1 of 1
File:	C:\altium\...\A5979LPRev1.SchDoc	Drawn By: Bob Pickett Sr.



Item	Quantity	Designator	value	Description	PartType	Footprint
1	4	C1, C4, C5, C6	0.22uF	50V Capacitor	Murata GCM21BR71H224KA37L; Digikey 490-4970-1-ND	0805
2	2	C2, C3	33uF	50V Capacitor	Chemi-Con HHXB500ARA330MF80G; Digikey 565-4189-1-ND	UCC F80 Cap
3	5	C7, C10, C11, C12, C15	0.1uF	16V Capacitor	Murata GRM219R71C104KA01D; Digikey 490-1683-1-ND	0805
4	1	C8	0.1uF	50V Capacitor	TDK C2012X7R1H104K085AA; Digikey 445-7534-1-ND	0805
5	1	C9	10uF	25V Capacitor	Murata GRM21BR61E106KA73L; Digikey 490-5523-1-ND	0805
6	2	C13, C14	1000pF	50V Capacitor	TDK FK28X7R1H102K; Digikey 445- 5246-ND	0.2" Cap
7	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
8	4	CP1, CP2, VCP, VREG		Mini Test Point	Keystone 5000; Digikey 5000K-ND	Mini Test Point
9	22	DIR, EXT_STEP, INT_STEP, MS1, MS2, nENABLE, nHOME, nRESET, nSLEEP, OUT1A, OUT1B, OUT2A, OUT2B, PFD, RC1, RC2, SENSE1, SENSE2, SR, STEP, VBB, VREF		Large Test Point	Keystone Electronics 5010; Digikey 5010K-ND	PAD 57 125 TP HB
10	4			Bumpon Foot	3M SJ-5303 (CLEAR); Digikey SJ5303- 7-ND	Bumpon Foot
11	1	J1		2-Pin Screw Down Connector	On Shore Technology ED120/2DS; Digikey ED1609-ND	2-pin screw down connector2
12	1	J2		4-Pin Screw Down Terminal Block	On Shore ED120/4DS; Digikey ED2227- ND	4-pin screw down connector
13	1	LED1			Lite-On LTST-C150GKT; Digikey 160- 1169-1-ND	1206 LED
14	2	P1, P2	10k	1/2W Potentiometer	Bourns 3299W-103LF; Digikey 3299W- 103LF-ND	Through-hole Trimpot
15				pcb	85-0758-001 Rev.1	
16	8 Pins	QR4, QR5, QC13, QC14		Sockets for through-hole components	Mill-Max 310-43-164-41-001000; Digikey ED6264-ND	
17	2	R1, R2	0.2	2W Resistor	TT Electronics LRC-LR2512LF-01- R200F; Digikey 989-1065-1-ND	2512 (6432 Metric) - duplicate
18	4	R3, R7, R8, R9	2k	1/8W Resistor	Panasonic ERJ-6GEYJ202V; Digikey P2.0KACT-ND	0805
19	2	R4, R5	30k	1/4W Resistor	Yageo MFR-25F50-30K1; Digikey 30.1KXBK-ND	AXIAL-0.3
20	1	R6	2.49k	1/8W Resistor	Rohm MCR10EZPF2491; Digikey RHM2.49KCRCT-ND	0805
21	1	R10	5k	1/8W Resistor	Panasonic ERJ-6ENF4991V; Digikey P4.99KCCT-ND	0805
22	1	RNET1		8 Bussed 2.2k resistors	Panasonic EXB-A10P222J; Digikey UJ222CT-ND	EXBA Resistor Network
23	2	SW1, SW2		Surface-mount momentary switch	C&K Components KSC201GLFS; Digikey 401-1755-1-ND	KSC201GLFS
24	1	SW3		Dual SPDT Switch	Grayhill 76STC02T; Digikey 76STC02T- ND	76STC02T
25	1	SWB1		7-Position Through-hole Switch	CTS 208-7; Digikey CT2087-ND	CTS 208-7 Switch
26	1	U1		Microstepping DMOS Driver with Translator	A5979LP	28LP
27	1	U2	5V	Linear Voltage Regulator	National LM2936HVMA-5.0/NOPB; Digikey LM2936HVMA-5.0/NOPB-ND	LM2936HVMA
28	1	U3		8-Bit Flash Microcontroller (MUST BE PROGRAMMED BEFORE INSTALLATION)	Microchip PIC10F206T-I/OT; Digikey PIC10F206T-I/OTCT-ND	SOT23-6
29	2	W1, W2		22 Gauge Buss Wire (300mils above pcb)		Scope Ground



W1 Ground

wire UBB

C11 CN1

EXT\_STEP  
BIR  
nENABLE  
nSLEEP  
nRESET  
MS2  
MS1  
SR

Faster  
Slower  
SW2  
SW3  
SW1

C9 U2 C8 JMP1

nHOME LED1 R3

P2 PFD R5 C13 C15 RC1 C12 RC2 C7 R2

UREF C14 R4 R6

Int. Step Small Change  
Ext. Step Large Change  
SWB1

J1 SENSE1 C3 OUT1A  
C1 OUT1B CP2 CP1 VCP  
U1 C4 C5 VREG OUT2B  
C2 OUT2A

W2 Ground

**Allegro**  
A5977/79LP  
Demo Board  
85-0758-001 Rev.1  
Worc. Apps. 2015

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