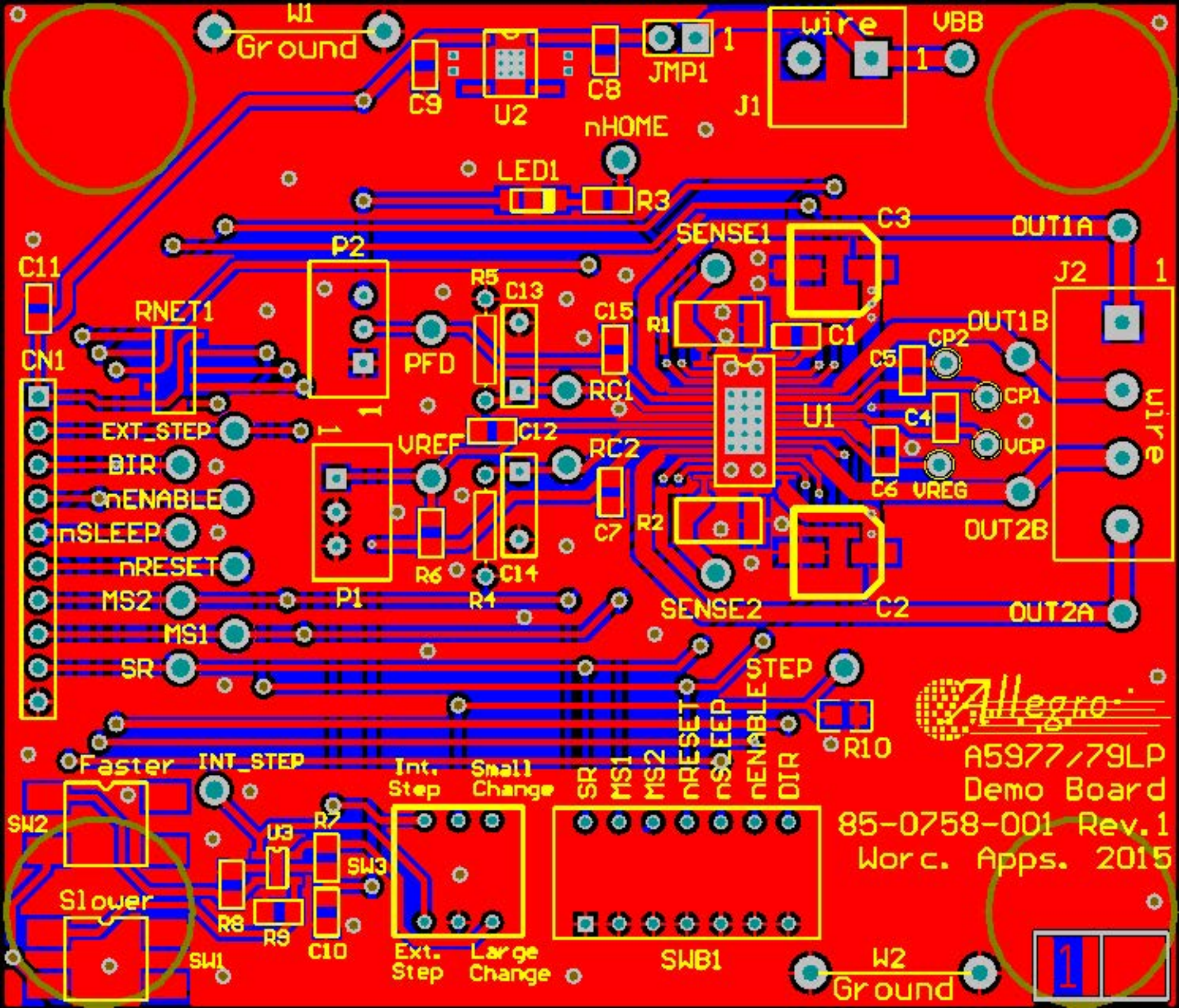


Title		
A5977LP Demo Board APEK		
Size	Number	Revision
A	85-0758-000-SCH	1
Date:	4/30/2015	Sheet 1 of 1
File:	C:\altium\...\A5977LPRev1.SchDoc	Drawn By: Bob Pickett Sr.



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			Bump-on Foot	3M SJ-5303 (CLEAR); Digikey SJ5303- 7-ND	Bump-on 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-25FBB-30K1; Digikey 30.1KXBBK-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	A5977LP	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

RNET1

CN1

EXT_STEP

BIR

nENABLE

nSLEEP

nRESET

MS2

MS1

SR

Faster

INT_STEP

Slower

SW1

C10

Int. Step

Small Change

Ext. Step

Large Change

SWB1

Allegro
A5977/79LP
Demo Board
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Worc. Apps. 2015

W2
Ground



