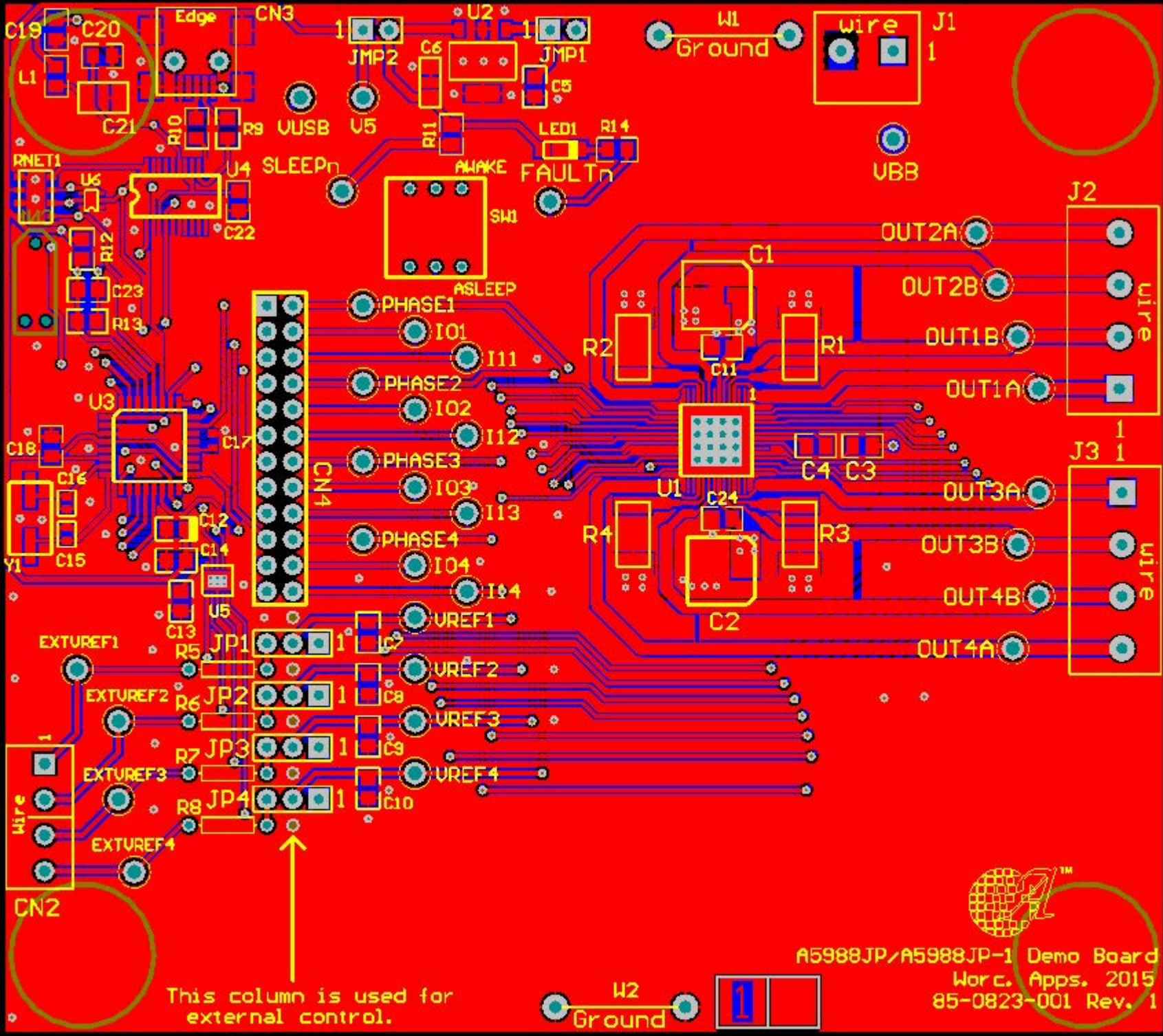


Title		
A5988JP Demo Board APEK		
Size	Number	Revision
A	85-0823-000-SCH	1
Date:	12/7/2015	Sheet 1 of 1
File:	C:\altium\...\A5988JPRev1.SchDoc	Drawn By: Bob Pickett Sr.

Item	Quantity	Designator	value	Description	PartType	Footprint
1	2	C1, C2	47uF	50V Capacitor	Chemi-Con EMZA500ADA470MF80G; Digikey 565-2568-1-ND	UCC F61 Cap
2	3	C3, C4, C5	0.1uF	50V Capacitor	TDK C2012X7R1H104K085AA; Digikey 445-7534-1-ND	0805
3	1	C6	10uF	10V Capacitor	Taiyo Yuden LMK316BJ106KL-T; Digikey 587-1342-1-ND	1206
4	4	C7, C8, C9, C10	1nF	50V Capacitor	Panasonic ECJ-2VB1H102K; Digikey PCC102BNCT-ND	0805
5	2	C11, C24	0.22uF	50V Capacitor	Murata GCM21BR71H224KA37L; Digikey 490-4970-1-ND	0805
6	1	C12	10uF	10V Capacitor	Abracon ATCC-211P-010-106M-T; Digikey ATCC-211P-010-106M-TCT-ND	Polarized0805Cap
7	6	C13, C14, C18, C20, C22, C23	0.1uF	16V Capacitor	Murata GRM219R71C104KA01D; Digikey 490-1683-1-ND	0805
8	2	C15, C16	20pF	50V Capacitor	TDK C1608COG1H200J; Digikey 445-5052-1-ND	0603
9	1	C17	0.1uF	50V Capacitor	TDK C1608X7R1H104K080AA; Digikey 445-1314-1-ND	CAPC1608L
10	1	C19	0.01uF	50V Capacitor	Murata GRM216R71H103KA01D; Digikey 490-1664-1-ND	0805
11	1	C21	4.7uF	16V Capacitor	Taiyo Yuden EMK325B7475KN-T; Digikey 587-1392-1-ND	1210
12	2	CN2		Use two 2-Pin Connectors	On Shore ED555/2DS; Digikey ED1514-ND	4-Pin 3.5mm Screwdown Connector2
13	1	CN3		USB Mini B Recepticle	JAE Electronics DX2R005HN2E700; Digikey 670-1190-1-ND	DX2R005HN2E700
14	1	CN4		Cut from 40-Pin Strip	Tyco 9-146257-0; Digikey A34977-40-ND	24-Pin Dual Row 0.1" Connector
15	33	EXTVREF1, EXTVREF2, EXTVREF3, EXTVREF4, FAULTn, I01, I02, I03, I04, I11, I12, I13, I14, OUT1A, OUT1B, OUT2A, OUT2B, OUT3A, OUT3B, OUT4A, OUT4B, PHASE1, PHASE2, PHASE3, PHASE4, SLEEPn, V5, VBB, VREF1, VREF2, VREF3, VREF4, VUSB		Large Test Point	Keystone Electronics 5010; Digikey 5010K-ND	PAD 57 125 TP HB
16	4			Bumpon Foot	3M SJ-5303 (CLEAR); Digikey SJ5303-7-ND	Bumpon Foot
17	1	J1		2-Pin Screw Down Connector	On Shore Technology ED120/2DS; Digikey ED1609-ND	2-pin screw down connector2
18	2	J2, J3		4-Pin Screw Down Terminal Block	On Shore ED120/4DS; Digikey ED2227-ND	4-pin screw down connector, 4-pin screw down connector2
19	16 Pins	JMP1, JMP2, JP1, JP2, JP3, JP4		Cut pins from 50-pin strip.	Samtec TSW-150-07-T-S; Digikey SAM1035-50-ND	2-pos. shunt, 3-pos. shunt
20	1	L1		Ferrite Bead	Laird MI0805K400R-10; Digikey 240-2389-1-ND	0805
21	1	LED1		Red Surface-mount LED	Lite-On LTST-C150CKT; Digikey 160-1167-1-ND	1206 LED
22	1			pcb	85-0731-001 Rev. 1	
23	8 Pins	QR5, QR6, QR7, QR8	0	Sockets for R5-R8	Mill-Max 310-43-164-41-001000; Digikey ED6264-ND	
24	4	R1, R2, R3, R4	0.3	1W Resistor	Yageo RL2512FK-070R3L; Digikey 311-0.3TCT-ND	2512 (6432 Metric)
25	4	R5, R6, R7, R8	0	Resistor Lead (0.38mm-0.64mm)	N/A	AXIAL-0.3
26	2	R9, R10	27	1/8W Resistor	Vishay/Dale CRCW080527R0FKEA; Digikey 541-27.0CCT-ND	0805
27	2	R11, R12	10k	1/8W Resistor	Panasonic ERJ-6GEYJ103V; Digikey P10KACT-ND	0805
28	1	R13	12k	1/8W Resistor	Panasonic ERJ-6ENF1202V; Digikey P12.0KCCT-ND	0805
29	1	R14	1k	1/8W Resistor	Panasonic ERJ-6GEYJ102V; Digikey P1.0KACT-ND	0805
30	1	RNET1	10k	4 Isolated Resistors	CTS 744C083103JP; Digikey 744C083103JPCT-ND	CTS 744 Series
31	1	SW1		Dual SPDT Switch	Grayhill 76STC02T; Digikey 76STC02T-ND	76STC02T
32	1	U1		Quad DMOS Full Bridge PWM Motor Driver	A5988xJP-T	48JP
33	1	U2	5V	Linear Voltage Regulator	National LM2936MP-5.0/NOPB; Digikey LM2936MP-5.0CT-ND	SOT223
34	1	U3		8-Bit Microcontroller	Atmel ATMEGA328P-AUR; Digikey ATMEGA328P-AURCT-ND	32-TQFP (7x7)
35	1	U4		USB to UART IC	FTDI FT231XS-R; Digikey 768-1129-1-ND	SSOP-20
36	1	U5		Quad 12-Bit DAC	Analog Devices AD5624RBCPZ-3REEL7; Digikey AD5624RBCPZ-3REEL7CT-ND	10-Pin EE w/slug
37	1	U6		Dual N-CH Fet's	Rohm UM6K1NTN; Digikey UM6K1NTNCT-ND	SOT-363
38	2	W1, W2		22 Gauge Buss Wire (300mils above pcb)		Scope Ground
39	1	Y1	16MHz	16MHz Crystal Oscillator(20pF Caps)	ECS ECS-160-20-3X-TR; Digikey XC1776CT-ND	ECS CSM-3X



This column is used for external control.

A5988JP/A5988JP-1 Demo Board  
 Wor. Apps. 2015  
 85-0823-001 Rev. 1

