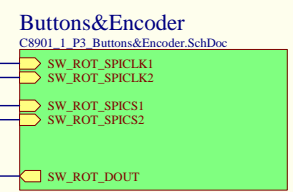
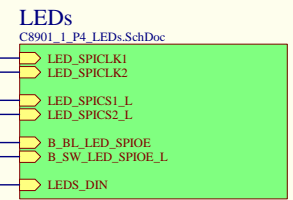
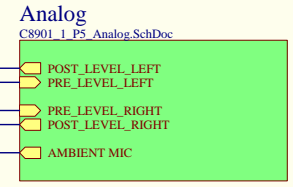
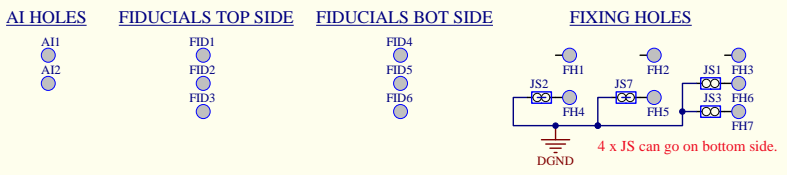
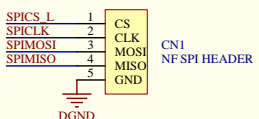


Place buffers nr header  
Buffers may be swapped for ease of layout.



**SPI Test**



ISSUE	BY	DATE	CHK BY
A	AG	23/07/12	
1	AG	08/10/12	

\* All parts to be RoHS Compliant \*

e  
d  
c  
b  
a

A B C D E F G H



Designator	Description	A&H PART
C1	CAPACITOR CERAMIC SMD0402 100N 16V (AF6674)	AF6674
C2	CAPACITOR CERAMIC SMD0402 100N 16V (AF6674)	AF6674
C3	CAPACITOR CERAMIC SMD0402 100N 16V (AF6674)	AF6674
C4	CAPACITOR CERAMIC SMD0402 100N 16V (AF6674)	AF6674
C5	CAPACITOR CERAMIC SMD0402 100N 16V (AF6674)	AF6674
C6	CAPACITOR CERAMIC SMD0402 100N 16V (AF6674)	AF6674
C7	CAPACITOR CERAMIC SMD0402 100N 16V (AF6674)	AF6674
C8	CAPACITOR CERAMIC SMD0402 100N 16V (AF6674)	AF6674
C9	CAPACITOR CERAMIC SMD0402 100N 16V (AF6674)	AF6674
C10	CAPACITOR CERAMIC SMD0402 100N 16V (AF6674)	AF6674
C11	CAPACITOR CERAMIC SMD0805 10UF X7R 6.3V (AF8253)	AF8253
C12	CAPACITOR CERAMIC SMD0402 100N 16V (AF6674)	AF6674
C13	CAPACITOR CERAMIC SMD0402 100N 16V (AF6674)	AF6674
C14	CAPACITOR CERAMIC SMD0402 100N 16V (AF6674)	AF6674
C15	CAPACITOR CERAMIC SMD0402 100N 16V (AF6674)	AF6674
C16	CAPACITOR CERAMIC SMD0402 100N 16V (AF6674)	AF6674
C17	CAPACITOR CERAMIC SMD0402 100N 16V (AF6674)	AF6674
C18	CAPACITOR CERAMIC SMD0805 10UF X7R 6.3V (AF8253)	AF8253
C19	CAPACITOR CERAMIC SMD0805 10UF X7R 6.3V (AF8253)	AF8253
C20	CAPACITOR CERAMIC SMD0805 10UF X7R 6.3V (AF8253)	AF8253
C21	CAPACITOR CERAMIC SMD0805 10UF X7R 6.3V (AF8253)	AF8253
C22	CAPACITOR CERAMIC SMD0402 100N 16V (AF6674)	AF6674
C23	CAPACITOR CERAMIC SMD0402 100N 16V (AF6674)	AF6674
C24	CAPACITOR CERAMIC SMD0402 100N 16V (AF6674)	AF6674
C25	CAPACITOR CERAMIC SMD0402 100N 16V (AF6674)	AF6674
C26	CAPACITOR CERAMIC SMD0402 100N 16V (AF6674)	AF6674
C27	CAPACITOR CERAMIC SMD0402 100N 16V (AF6674)	AF6674
C28	CAPACITOR CERAMIC SMD0402 100N 16V (AF6674)	AF6674
C29	CAPACITOR CERAMIC SMD0402 100N 16V (AF6674)	AF6674
C30	CAPACITOR ELECTROLYTIC SMD 10uF 16V (AF5235)	AF5235
C31	CAPACITOR CERAMIC SMD0402 100N 16V (AF6674)	AF6674
C32	CAPACITOR CERAMIC SMD0402 100N 16V (AF6674)	AF6674
C33	CAPACITOR CERAMIC SMD0603 22P (AF4829)	AF4829
C35	CAPACITOR CERAMIC SMD0805 2N2 (AF3548)	AF3548
C36	CAPACITOR CERAMIC SMD0805 22N (AF5035)	AF5035
C37	CAPACITOR CERAMIC SMD0402 100N 16V (AF6674)	AF6674
C38	CAPACITOR CERAMIC SMD0402 100N 16V (AF6674)	AF6674
C39	CAPACITOR CERAMIC SMD0402 100N 16V (AF6674)	AF6674
C40	CAPACITOR CERAMIC SMD0805 22N (AF5035)	AF5035
C41	CAPACITOR CERAMIC SMD0402 100N 16V (AF6674)	AF6674
CN2	Connector IDC, Rear / Front Entry, 0.1" Pitch 15x2 pins (AL9002)	AL9002
ENC1	ENCODER FORWARD DC11B1512401 11mm VERTICAL (AI9021)	AI9021
LD1	LED SMD SUN YELLOW 1106 (AE5948)	AE5948
LD2	LED SMD SUN YELLOW 1106 (AE5948)	AE5948
LD3	LED SMD SUN YELLOW 1106 (AE5948)	AE5948
LD4	LED SMD SUN YELLOW 1106 (AE5948)	AE5948
LD5	LED SMD SUN YELLOW 1106 (AE5948)	AE5948
LD6	LED SMD SUN YELLOW 1106 (AE5948)	AE5948
LD7	LED SMD SUN YELLOW 1106 (AE5948)	AE5948

LD8	LED SMD SUN YELLOW 1106 (AE5948)	AE5948
LD9	LED SMD SUN YELLOW 1106 (AE5948)	AE5948
LD10	LED SMD SUN YELLOW 1106 (AE5948)	AE5948
LD11	LED SMD SUN YELLOW 1106 (AE5948)	AE5948
LD12	LED SMD SUN YELLOW 1106 (AE5948)	AE5948
LD13	LED SMD SUN YELLOW 1106 (AE5948)	AE5948
LD14	LED SMD SUN YELLOW 1106 (AE5948)	AE5948
LD15	LED SMD SUN YELLOW 1106 (AE5948)	AE5948
LD16	LED SMD SUN YELLOW 1106 (AE5948)	AE5948
LD17	LED SMD SUN YELLOW 1106 (AE5948)	AE5948
LD18	LED SMD SUN YELLOW 1106 (AE5948)	AE5948
LD19	LED SMD SUN YELLOW 1106 (AE5948)	AE5948
LD20	LED SMD SUN YELLOW 1106 (AE5948)	AE5948
LD21	LED SMD SUN RED 0603 (ZMDK53W-3)(AE9069)	AE9069
LD22	LED SMD SUN YELLOW 0603 (ZMYK53W-3)(AE9070)	AE9070
LD23	LED SMD SUN YELLOW 1106 (AE5948)	AE5948
LD24	LED SMD SUN YELLOW 0603 (ZMYK53W-3)(AE9070)	AE9070
LD25	LED SMD SUN YELLOW 0603 (ZMYK53W-3)(AE9070)	AE9070
Q1	TRANSISTOR SMD BC848B NPN (AE3332)	AE3332
Q2	TRANSISTOR SMD BC848B NPN (AE3332)	AE3332
Q3	TRANSISTOR SMD BC848B NPN (AE3332)	AE3332
Q4	TRANSISTOR SMD BC848B NPN (AE3332)	AE3332
R1	RESISTOR CARBON SMD0402 68R 1% (AC7354)	AC7354
R2	RESISTOR CARBON SMD0402 68R 1% (AC7354)	AC7354
R3	RESISTOR CARBON SMD0402 100R 1% (AC7356)	AC7356
R4	RESISTOR CARBON SMD0402 100R 1% (AC7356)	AC7356
R5	RESISTOR CARBON SMD0402 68R 1% (AC7354)	AC7354
R6	RESISTOR CARBON SMD0402 68R 1% (AC7354)	AC7354
R7	RESISTOR CARBON SMD0402 68R 1% (AC7354)	AC7354
R8	RESISTOR CARBON SMD0402 47R 1% (AC7281)	AC7281
R9	RESISTOR CARBON SMD0402 82R 1% (AC7355)	AC7355
R10	RESISTOR CARBON SMD0402 47R 1% (AC7281)	AC7281
R11	RESISTOR CARBON SMD0402 68R 1% (AC7354)	AC7354
R15	RESISTOR METAL SMD0402 2K7 0.5% (AC8469)	AC8469
R16	RESISTOR CARBON SMD0402 22R 1% (AC7352)	AC7352
R17	RESISTOR CARBON SMD0402 22R 1% (AC7352)	AC7352
R18	RESISTOR CARBON SMD0402 22R 1% (AC7352)	AC7352
R19	RESISTOR CARBON SMD0402 22R 1% (AC7352)	AC7352
R20	RESISTOR CARBON SMD0402 22R 1% (AC7352)	AC7352
R21	RESISTOR CARBON SMD0402 22R 1% (AC7352)	AC7352
R22	RESISTOR CARBON SMD0402 22R 1% (AC7352)	AC7352
R23	RESISTOR CARBON SMD0402 22R 1% (AC7352)	AC7352
R24	RESISTOR CARBON SMD0402 22R 1% (AC7352)	AC7352
R25	RESISTOR CARBON SMD0402 22R 1% (AC7352)	AC7352
R26	RESISTOR CARBON SMD0402 22R 1% (AC7352)	AC7352
R27	RESISTOR CARBON SMD0402 22R 1% (AC7352)	AC7352
R28	RESISTOR METAL SMD0402 330R 0.5% (AC8460)	AC8460
R29	RESISTOR METAL SMD0402 330R 0.5% (AC8460)	AC8460
R30	RESISTOR METAL SMD0402 330R 0.5% (AC8460)	AC8460
R31	RESISTOR METAL SMD0402 330R 0.5% (AC8460)	AC8460

R32	RESISTOR METAL SMD0402 330R 0.5% (AC8460)	AC8460
R33	RESISTOR METAL SMD0402 330R 0.5% (AC8460)	AC8460
R34	RESISTOR METAL SMD0402 330R 0.5% (AC8460)	AC8460
R35	RESISTOR METAL SMD0402 330R 0.5% (AC8460)	AC8460
R36	RESISTOR METAL SMD0402 330R 0.5% (AC8460)	AC8460
R37	RESISTOR METAL SMD0402 330R 0.5% (AC8460)	AC8460
R38	RESISTOR METAL SMD0402 330R 0.5% (AC8460)	AC8460
R39	RESISTOR METAL SMD0402 330R 0.5% (AC8460)	AC8460
R40	RESISTOR METAL SMD0402 2K7 0.5% (AC8469)	AC8469
R42	RESISTOR METAL SMD0402 2K7 0.5% (AC8469)	AC8469
R43	RESISTOR CARBON SMD0402 10K 1% (AC7359)	AC7359
R44	RESISTOR CARBON SMD0402 22R 1% (AC7352)	AC7352
R45	RESISTOR CARBON SMD0402 22R 1% (AC7352)	AC7352
R46	RESISTOR CARBON SMD0402 22R 1% (AC7352)	AC7352
R47	RESISTOR CARBON SMD0402 22R 1% (AC7352)	AC7352
R48	RESISTOR CARBON SMD0402 22R 1% (AC7352)	AC7352
R49	RESISTOR CARBON SMD0402 22R 1% (AC7352)	AC7352
R50	RESISTOR CARBON SMD0402 22R 1% (AC7352)	AC7352
R51	RESISTOR CARBON SMD0402 22R 1% (AC7352)	AC7352
R52	RESISTOR CARBON SMD0402 68R 1% (AC7354)	AC7354
R53	RESISTOR CARBON SMD0402 22R 1% (AC7352)	AC7352
R54	RESISTOR CARBON SMD0402 22R 1% (AC7352)	AC7352
R55	RESISTOR METAL SMD0402 330R 0.5% (AC8460)	AC8460
R56	RESISTOR METAL SMD0402 330R 0.5% (AC8460)	AC8460
R57	RESISTOR METAL SMD0402 330R 0.5% (AC8460)	AC8460
R58	RESISTOR METAL SMD0402 330R 0.5% (AC8460)	AC8460
R59	RESISTOR METAL SMD0402 330R 0.5% (AC8460)	AC8460
R60	RESISTOR METAL SMD0402 330R 0.5% (AC8460)	AC8460
R61	RESISTOR METAL SMD0402 330R 0.5% (AC8460)	AC8460
R62	RESISTOR METAL SMD0402 330R 0.5% (AC8460)	AC8460
R63	RESISTOR CARBON SMD0402 33R 1% (AC7353)	AC7353
R64	RESISTOR METAL SMD0402 330R 0.5% (AC8460)	AC8460
R65	RESISTOR CARBON SMD0402 47R 1% (AC7281)	AC7281
R66	RESISTOR CARBON SMD0402 47R 1% (AC7281)	AC7281
R67	RES SMD TF 10K 0.5% 0805 MET (H1Y84XR) (AC6018)	AC6018
R68	RESISTOR METAL SMD0402 47K 0.5% (AC8482)	AC8482
R69	RESISTOR CARBON SMD0402 0R0 (AC7350)	AC7350
R70	RESISTOR CARBON SMD0402 0R0 (AC7350)	AC7350
R72	RESISTOR CARBON SMD0402 100R 1% (AC7356)	AC7356
R73	RES SMD TF 10K 0.5% 0805 MET (H1Y84XR) (AC6018)	AC6018
R74	RES SMD TF 10K 0.5% 0805 MET (H1Y84XR) (AC6018)	AC6018
R75	RES SMD TF 10K 0.5% 0805 MET (H1Y84XR) (AC6018)	AC6018
R78	RESISTOR CARBON SMD0402 0R0 (AC7350)	AC7350
R79	RESISTOR CARBON SMD0402 0R0 (AC7350)	AC7350
R80	RESISTOR CARBON SMD0402 0R0 (AC7350)	AC7350
R81	RESISTOR CARBON SMD0402 0R0 (AC7350)	AC7350
RP1	SM RESISTOR PACK 10K x 4 5% 1206 CONC (AC4573)	AC4573
RP2	SM RESISTOR PACK 10K x 4 5% 1206 CONC (AC4573)	AC4573
RP3	SM RESISTOR PACK 10K x 4 5% 1206 CONC (AC4573)	AC4573
RP4	SM RESISTOR PACK 10K x 4 5% 1206 CONC (AC4573)	AC4573

RP5	SM RESISTOR PACK 10K x 4 5% 1206 CONC (AC4573)	AC4573
RP6	SM RESISTOR PACK 10K x 4 5% 1206 CONC (AC4573)	AC4573
RP7	SM RESISTOR PACK 10K x 4 5% 1206 CONC (AC4573)	AC4573
RP8	SM RESISTOR PACK 10K x 4 5% 1206 CONC (AC4573)	AC4573
SW1	IGL CHAN SW SML	
SW2	IGL CHAN SW SML	
SW3	IGL CHAN SW SML	
SW4	IGL CHAN SW SML	
SW5	IGL CHAN SW SML	
SW6	IGL CHAN SW SML	
SW7	IGL CHAN SW SML	
SW8	IGL CHAN SW SML	
SW9	IGL CHAN SW SML	
SW10	IGL CHAN SW SML	
SW11	IGL CHAN SW SML	
SW12	IGL CHAN SW SML	
SW13	IGL CHAN SW SML	
SW14	IGL CHAN SW SML	
SW15	IGL CHAN SW SML	
SW16	IGL CHAN SW SML	
SW17	IGL CHAN SW LRG	
SW18	IGL CHAN SW SML	
SW19	IGL CHAN SW SML	
SW20	IGL CHAN SW SML	
SW21	IGL CHAN SW SML	
SW22	IGL CHAN SW SML	
U1	IC SMD 74AHC541PW OCTAL BUFFER/LINE DRIVERS (AE7596)	AE7596
U2	IC SMD 74LVC1G02 SINGLE 2-INPUT NOR GATE(AE8490)	AE8490
U3	IC SMD 74LVC1G02 SINGLE 2-INPUT NOR GATE(AE8490)	AE8490
U4	IC SMD 74HC165 PARALLEL LOAD 8-BIT SHIFT REG (AE5905)	AE5905
U5	IC SMD 74HC165 PARALLEL LOAD 8-BIT SHIFT REG (AE5905)	AE5905
U6	IC SMD 74HC165 PARALLEL LOAD 8-BIT SHIFT REG (AE5905)	AE5905
U7	IC SMD 74HC165 PARALLEL LOAD 8-BIT SHIFT REG (AE5905)	AE5905
U8	IC SMD 74HC595PW SHIFT REG (AE7766)	AE7766
U9	IC SMD 74HC595PW SHIFT REG (AE7766)	AE7766
U10	IC SMD 74HC595PW SHIFT REG (AE7766)	AE7766
U11	IC SMD 74HC595PW SHIFT REG (AE7766)	AE7766
U12	IC SMD 74HC595PW SHIFT REG (AE7766)	AE7766
U13	IC SMD 74HC595PW SHIFT REG (AE7766)	AE7766
U14	IC SMD RC4580IPWR DUAL OP-AMP (AE8935)	AE8935
U15	IC SMD RC4580IPWR DUAL OP-AMP (AE8935)	AE8935
VR1	POT TOPUP 11MM 10KA X2 L15/F7(AI9020)	AI9020
VR2	POT TOPUP 11MM 10KA X2 L15/F7(AI9020)	AI9020

**Switches**

No part number for SW

Switches are printed on the PCB

Switches are not separate parts

It is not possible to order switches