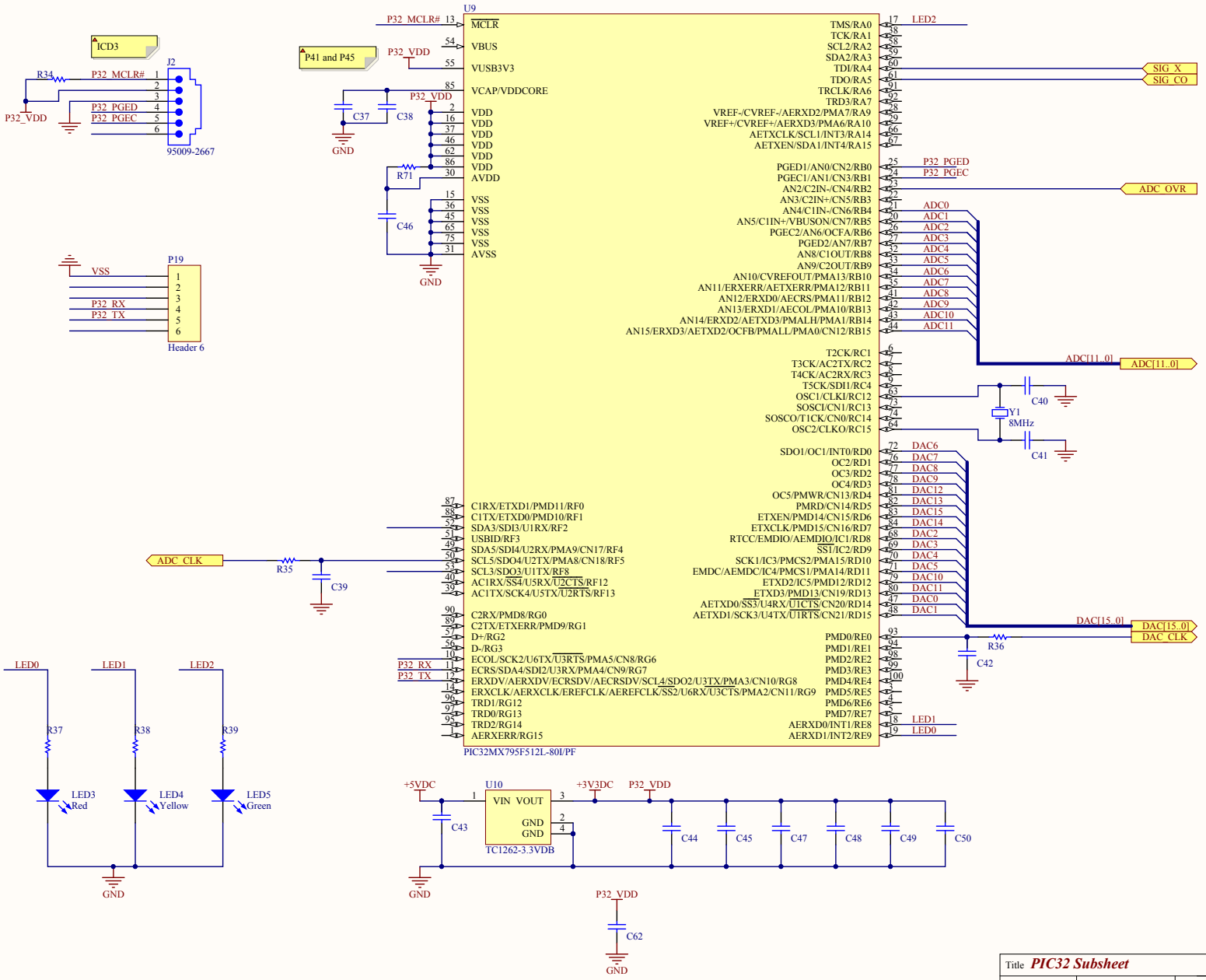
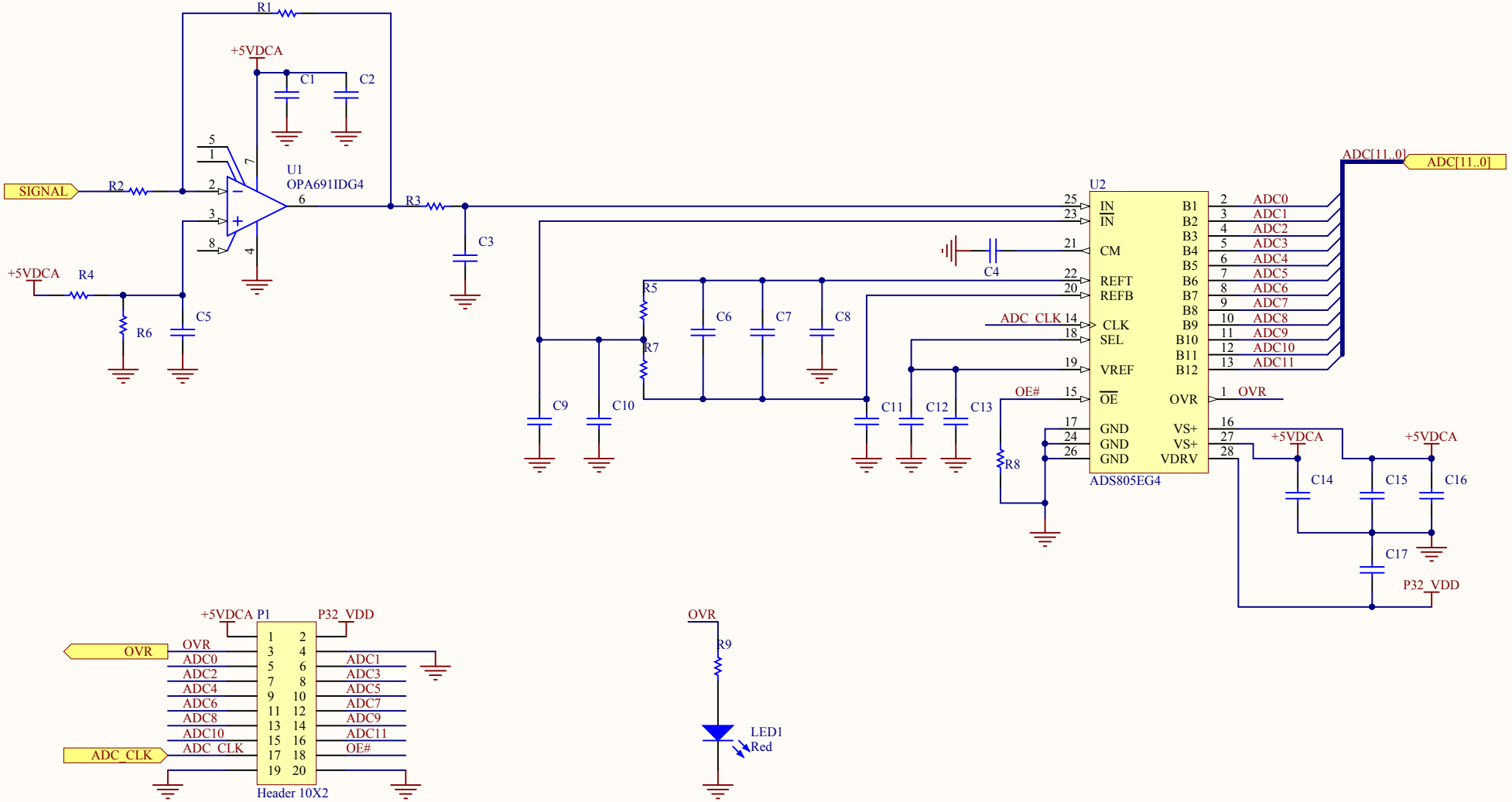
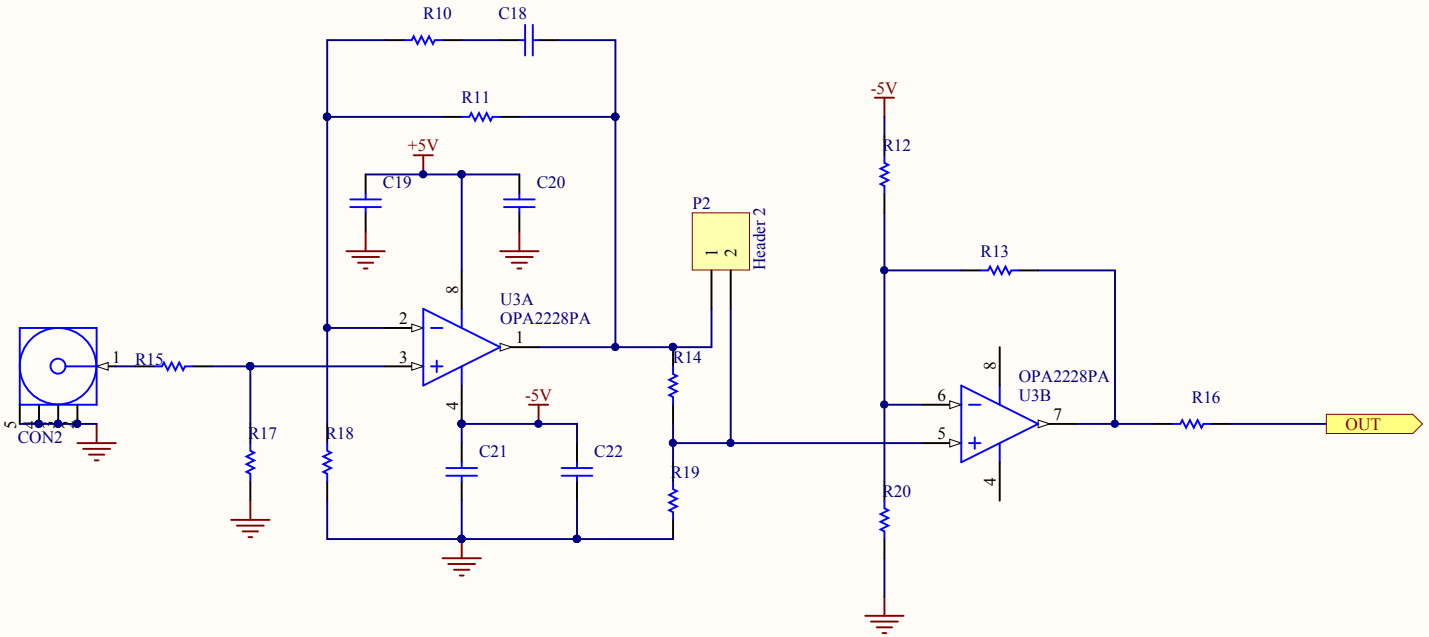


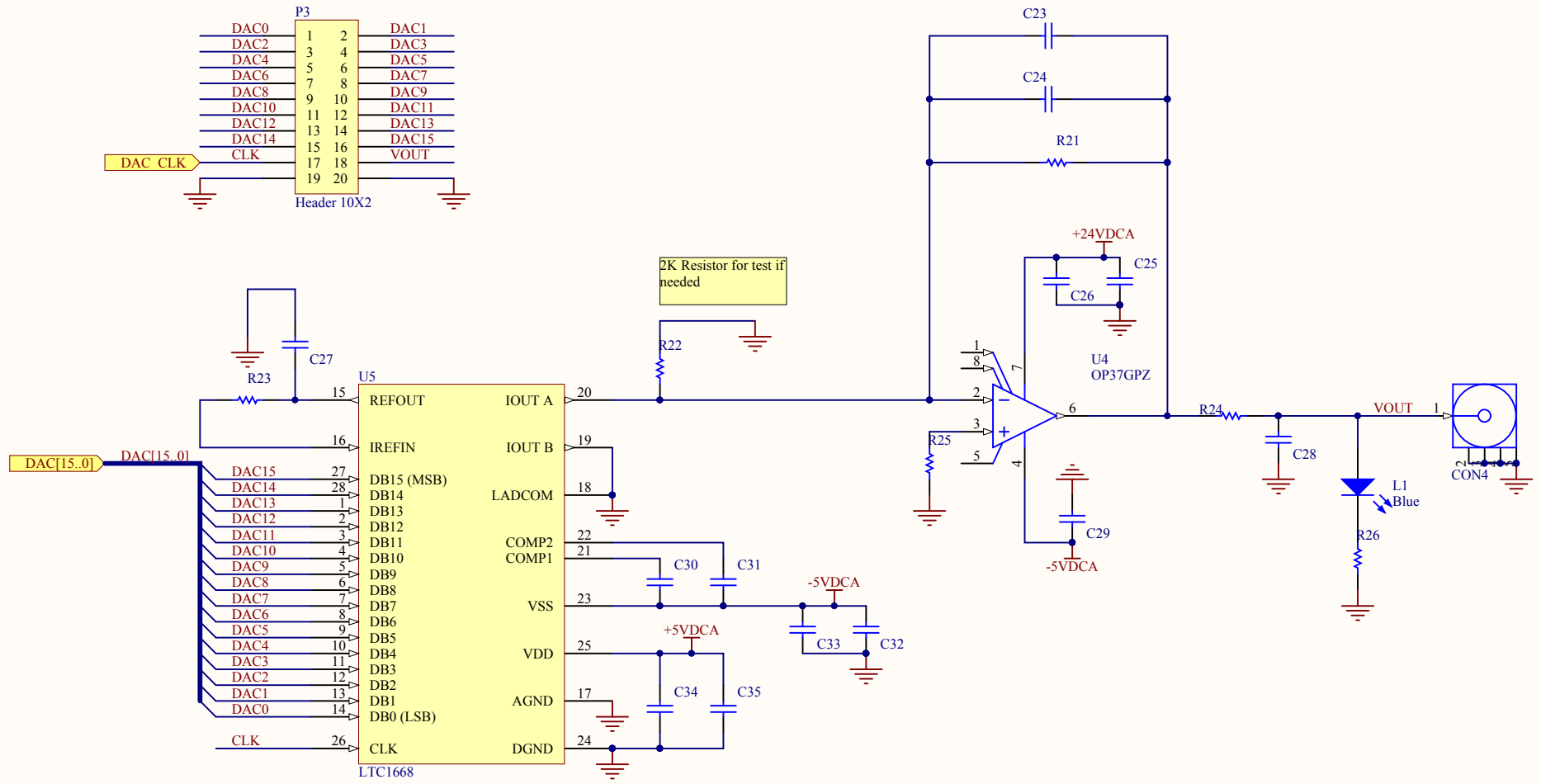
Title	***PIC32 Subsheet***		
Size: A3	Number:293	Revision:A	Author : Matthew Southgate Engineer : Matthew Southgate
Date: 08/05/2014	Time: 11:12:31	Sheet 1 of =	
File: B293A PIC32.SchDoc			



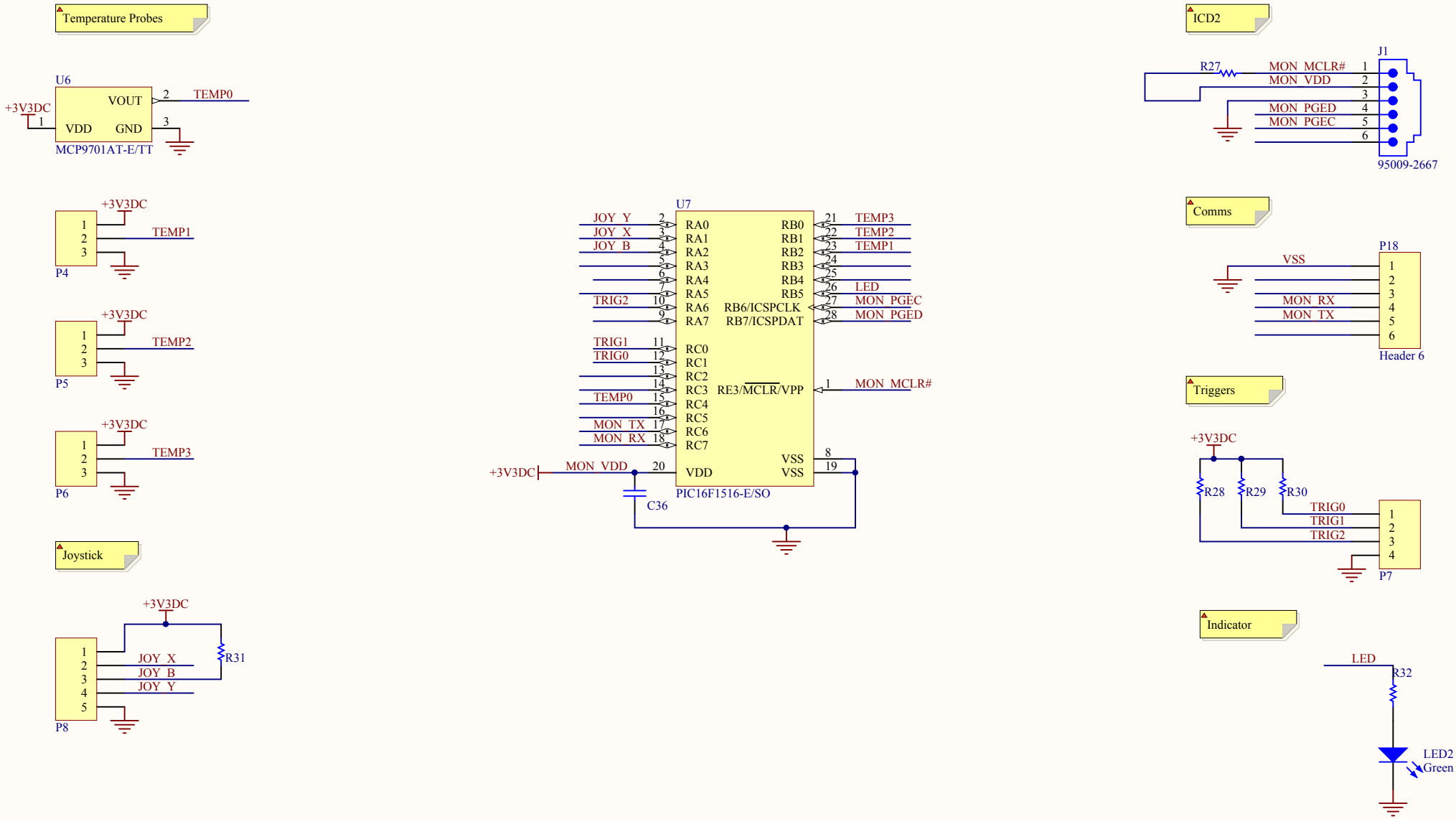
Title *ADC*			
Size: A4	Number:293	Revision:A	Author : Matthew Southgate
Date: 08/05/2014	Time: 11:12:31	Sheet* of *	Engineer : Matthew Southgate
File: B293A ADC.SchDoc			



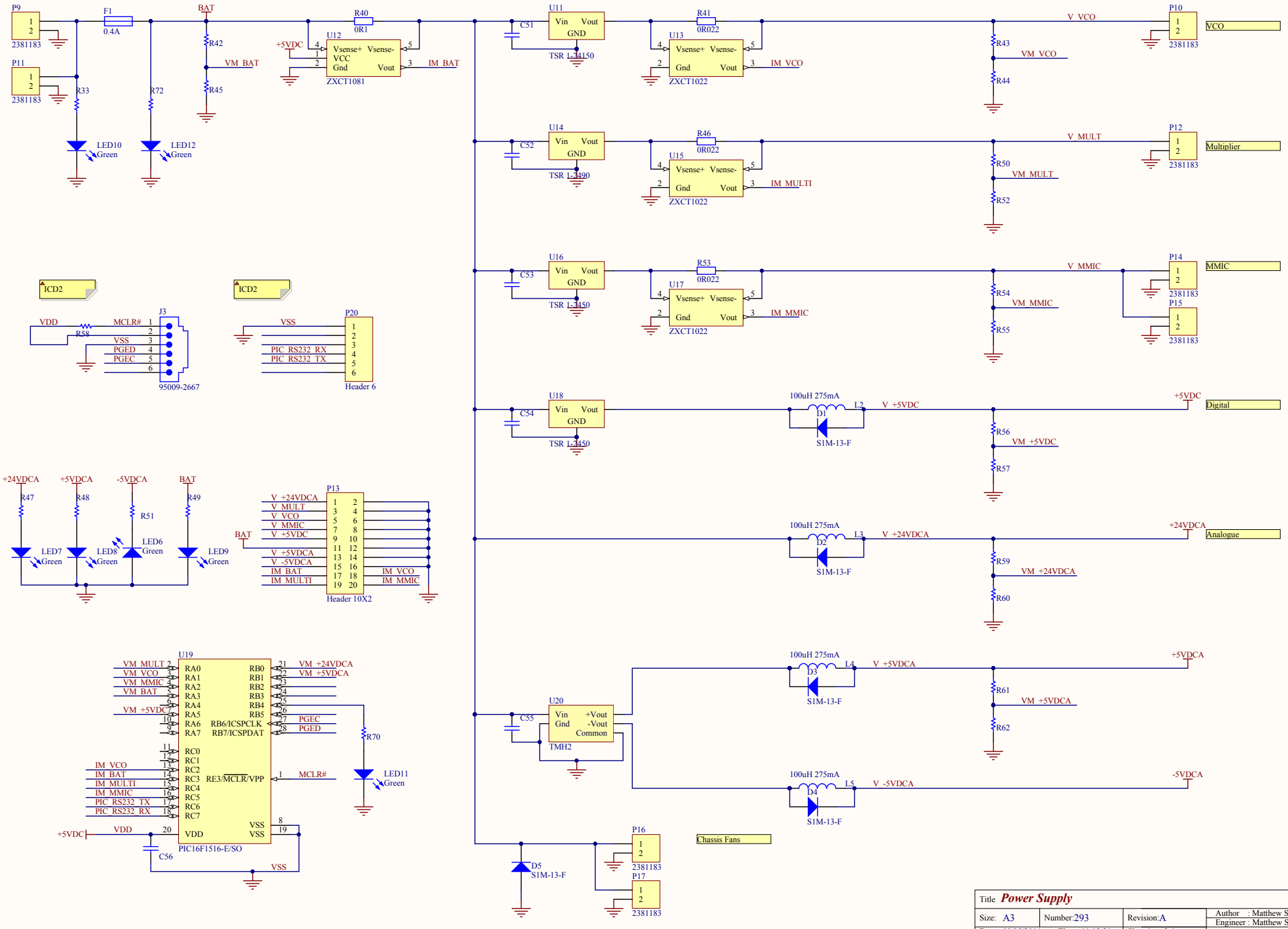
Title	***CoX Amp***		
Size: A4	Number:293	Revision:A	Author : Matthew Southgate Engineer : Matthew Southgate
Date: 08/05/2014 Time: 11:12:31		Sheet* of *	
File: B293A CoX Amp.SchDoc			

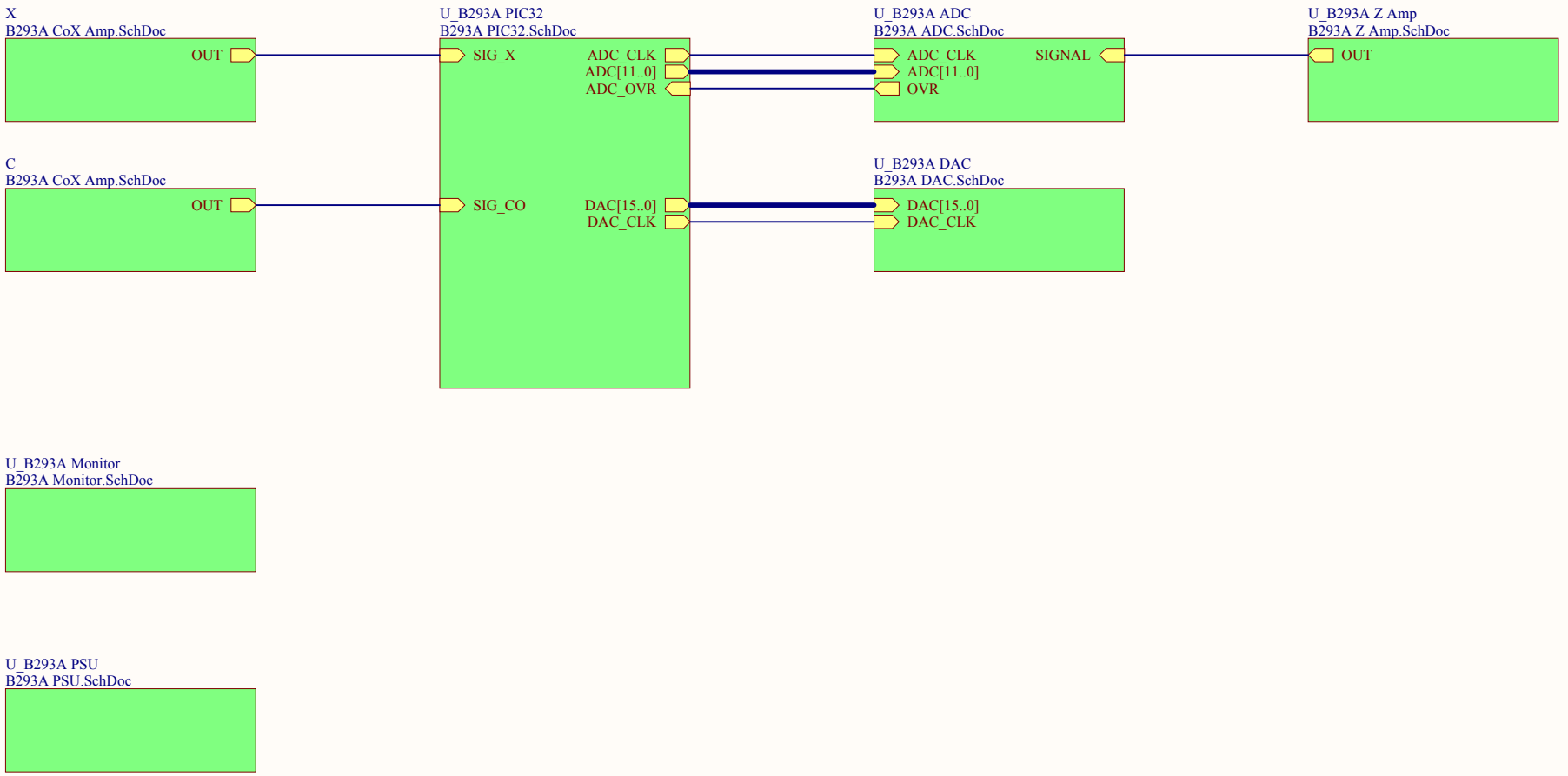


Title *DAC*			
Size: A4	Number:293	Revision:A	Author : Matthew Southgate
Date: 08/05/2014	Time: 11:12:31	Sheet* of *	Engineer : Matthew Southgate
File: B293A DAC.SchDoc			



Title	***Monitor Circuits***		
Size: A4	Number:293	Revision:A	Author : Matthew Southgate
Date: 08/05/2014	Time: 11:12:31	Sheet* of *	Engineer : Matthew Southgate
File: B293A Monitor.SchDoc			


P9
P11
2381183
F1
0.4A
BAT
R42
VM_BAT
R45
R33
R72
LED10
Green
LED12
Green
U12
+5VDC
Vsense+ Vsense-
VCC
Gnd Vout
ZXCT1081
R40
0R1
IM_BAT
U11
Vin Vout
GND
C51
TSR 1-2450
U13
R41
0R022
ZXCT1022
IM_VCO
V_VCO
R43
VM_VCO
R44
P10
VCO
U14
C52
TSR 1-2490
U15
R46
0R022
IM_MULTI
V_MULT
R50
VM_MULT
R52
P12
Multiplier
U16
C53
TSR 1-2450
U17
R53
0R022
IM_MMIC
V_MMIC
R54
VM_MMIC
R55
P14
MMIC
P15
ICD2
J3
VDD
R58
MCLR#
VSS
PGED
PGEC
95009-2667
ICD2
P20
VSS
PIC_RS232_RX
PIC_RS232_TX
Header 6
U18
C54
TSR 1-2450
100uH 275mA
L2
D1
S1M-13-F
V +5VDC
R56
VM +5VDC
R57
+5VDC
Digital
+24VDCA
+5VDCA
-5VDCA
BAT
R47
R48
R51
R49
LED7
Green
LED8
Green
LED6
Green
LED9
Green
P13
V +24VDCA
V MULT
V VCO
V MMIC
V +5VDC
V +5VDCA
V -5VDCA
IM BAT
IM MULTI
IM VCO
IM MMIC
Header 10X2
100uH 275mA
L3
D2
S1M-13-F
V +24VDCA
R59
VM +24VDCA
R60
+24VDCA
Analogue
U19
VM_MULT
VM_VCO
VM_MMIC
VM_BAT
VM_+5VDC
IM_VCO
IM_BAT
IM_MULTI
IM_MMIC
PIC_RS232_TX
PIC_RS232_RX
RA0 RA1 RA2 RA3 RA4 RA5 RA6 RA7
RB0 RB1 RB2 RB3 RB4 RB5 RB6/ICSPCLK RB7/ICSPDAT
RC0 RC1 RC2 RC3 RC4 RC5 RC6 RC7
RE3/MCLR/VPP
VDD VSS
VM_+24VDCA
VM_+5VDCA
PGEC
PGED
MCLR#
R70
LED11
Green
+5VDC
VDD
C56
VSS
PIC16F1516-E/SO
U20
Vin +Vout
Gnd -Vout
Common
C55
TMH2
100uH 275mA
L4
D3
S1M-13-F
V +5VDCA
R61
VM +5VDCA
R62
+5VDCA
100uH 275mA
L5
D4
S1M-13-F
V -5VDCA
-5VDCA
D5
S1M-13-F
P16
P17
2381183
Chassis Fans
Title Power Supply
Size: A3
Number:293
Revision:A
Author : Matthew Southgate
Engineer : Matthew Southgate
Date: 08/05/2014
Time: 11:12:31
Sheet* of *
File: B293A PSU.SchDoc



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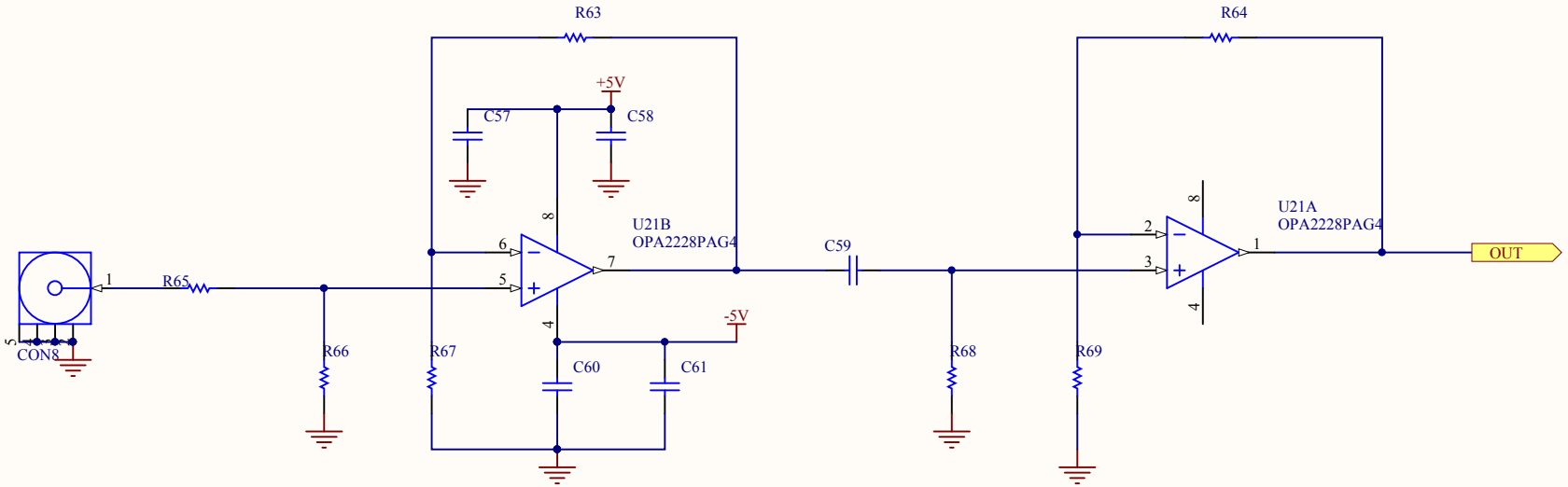
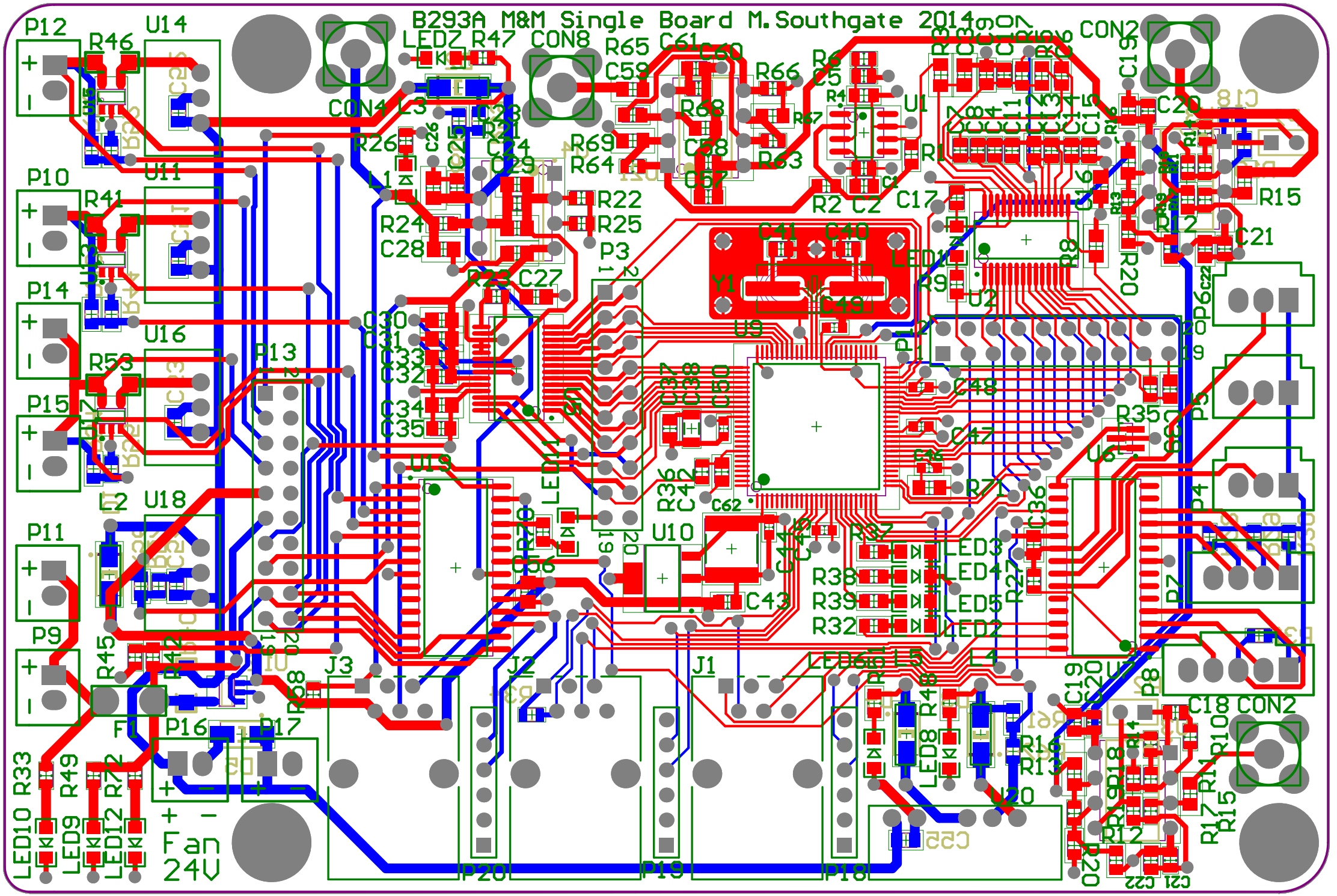
Size A4	Number	Revision
Date: 08/05/2014		Sheet of
File: C:\Files\..\B293A Top.SchDoc		Drawn By:



Title	***Z Amp***		
Size: A4	Number:293	Revision:A	Author : Matthew Southgate Engineer : Matthew Southgate
Date: 08/05/2014	Time: 11:12:32	Sheet* of *	
File: B293A Z Amp.SchDoc			


B293A M&M Single Board M.Southgate 2014
P12
P10
P14
P15
P11
P9
U14
U11
U16
U18
U13
U10
U9
U1
U2
U6
U20
P13
P3
P1
P2
P4
P5
P6
P7
P8
P16
P17
P18
P19
P20
J1
J2
J3
CON2
CON4
CON8
LED1
LED2
LED3
LED4
LED5
LED6
LED7
LED8
LED9
LED10
LED12
Fan
24V
Y1

Board S