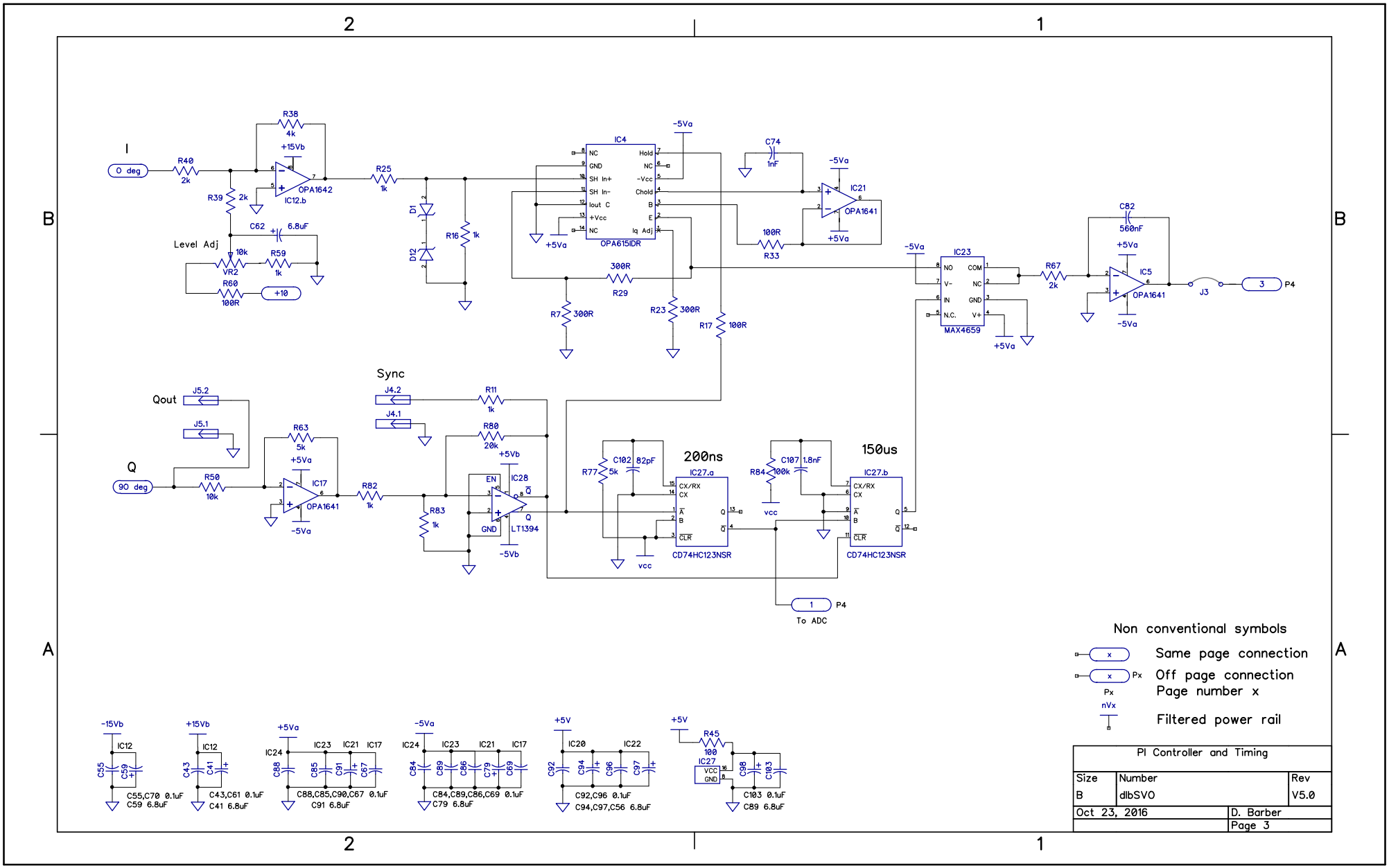
I
0 deg
R40
2k
R38
4k
+15Vb
OPA1642
IC12.b
R39
2k
C62
6.8uF
Level Adj
10k
VR2
R59
1k
R60
100R
+10
R25
1k
D1
D12
R16
1k
IC4
OPA615IDR
NC
GND
SH In+
SH In-
Iout C
+Vcc
NC
Hold
NC
-Vcc
Chold
B
E
Iq Adj
+5Va
-5Va
C74
1nF
IC21
OPA1641
100R
R33
300R
R29
R7
300R
R23
300R
R17
100R
IC23
MAX4659
NO
V-
IN
N.C.
COM
NC
GND
V+
R67
2k
C82
560nF
IC5
OPA1641
J3
3
P4
Sync
J4.2
J4.1
R11
1k
R80
20k
Qout
J5.2
J5.1
Q
90 deg
R50
10k
R63
5k
IC17
OPA1641
R82
1k
R83
1k
IC28
LT1394
EN
Q
GND
-5Vb
R77
5k
C102
82pF
200ns
IC27.a
CD74HC123NSR
CX/RX
CX
A
B
CLR
Q
vcc
R84
100k
C107
1.8nF
150us
IC27.b
CD74HC123NSR
1
P4
To ADC
Non conventional symbols
Same page connection
Off page connection
Page number x
Filtered power rail
-15Vb
+15Vb
+5Va
-5Va
+5V
C55,C70 0.1uF
C59 6.8uF
C43,C61 0.1uF
C41 6.8uF
C88,C85,C90,C67 0.1uF
C91 6.8uF
C84,C89,C86,C69 0.1uF
C79 6.8uF
C92,C96 0.1uF
C94,C97,C56 6.8uF
R45
100
IC27
C103 0.1uF
C89 6.8uF
PI Controller and Timing
Size
B
Number
dlbSV0
Rev
V5.0
Oct 23, 2016
D. Barber
Page 3