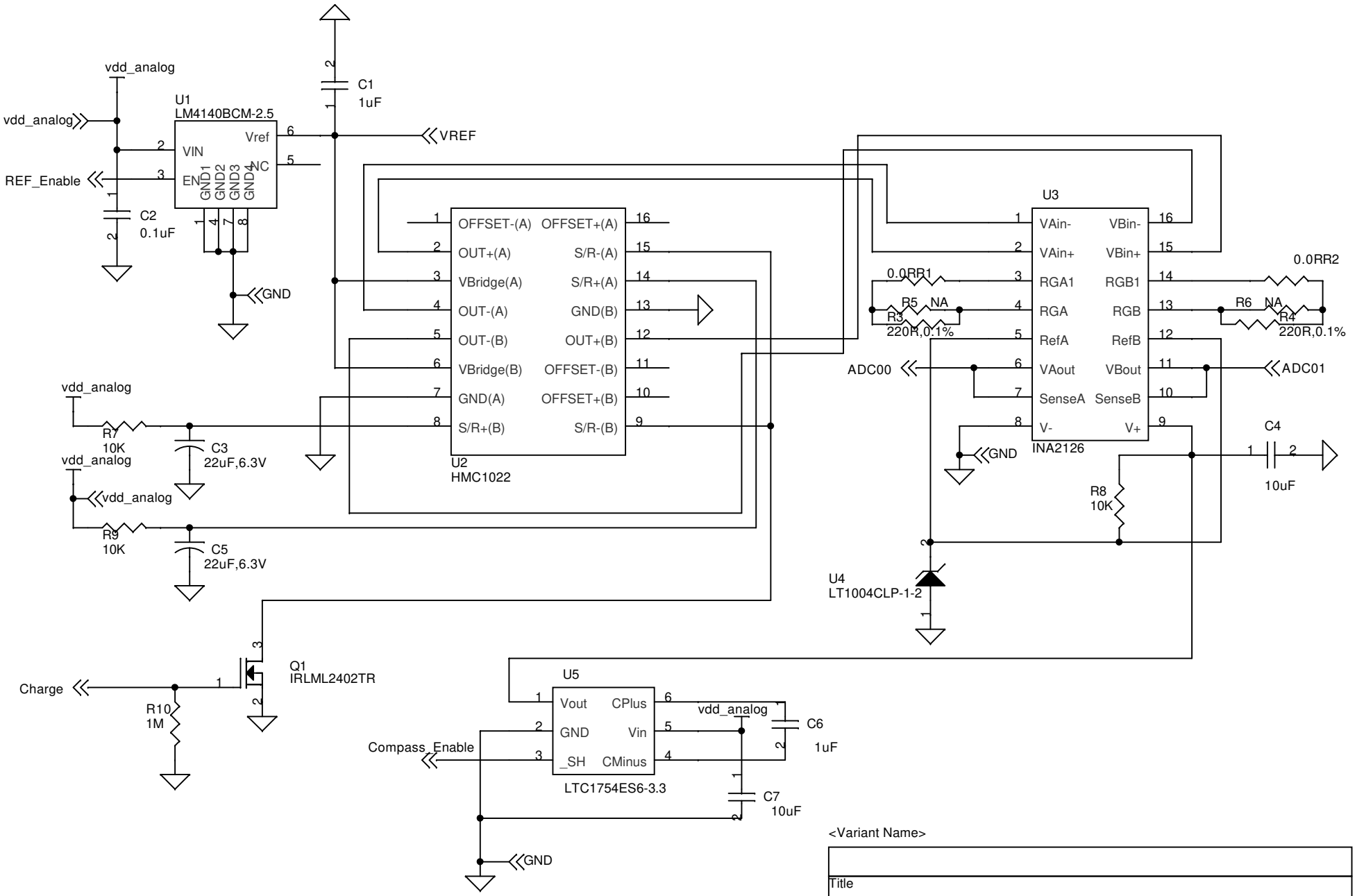

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Size A	Document Number	Rev
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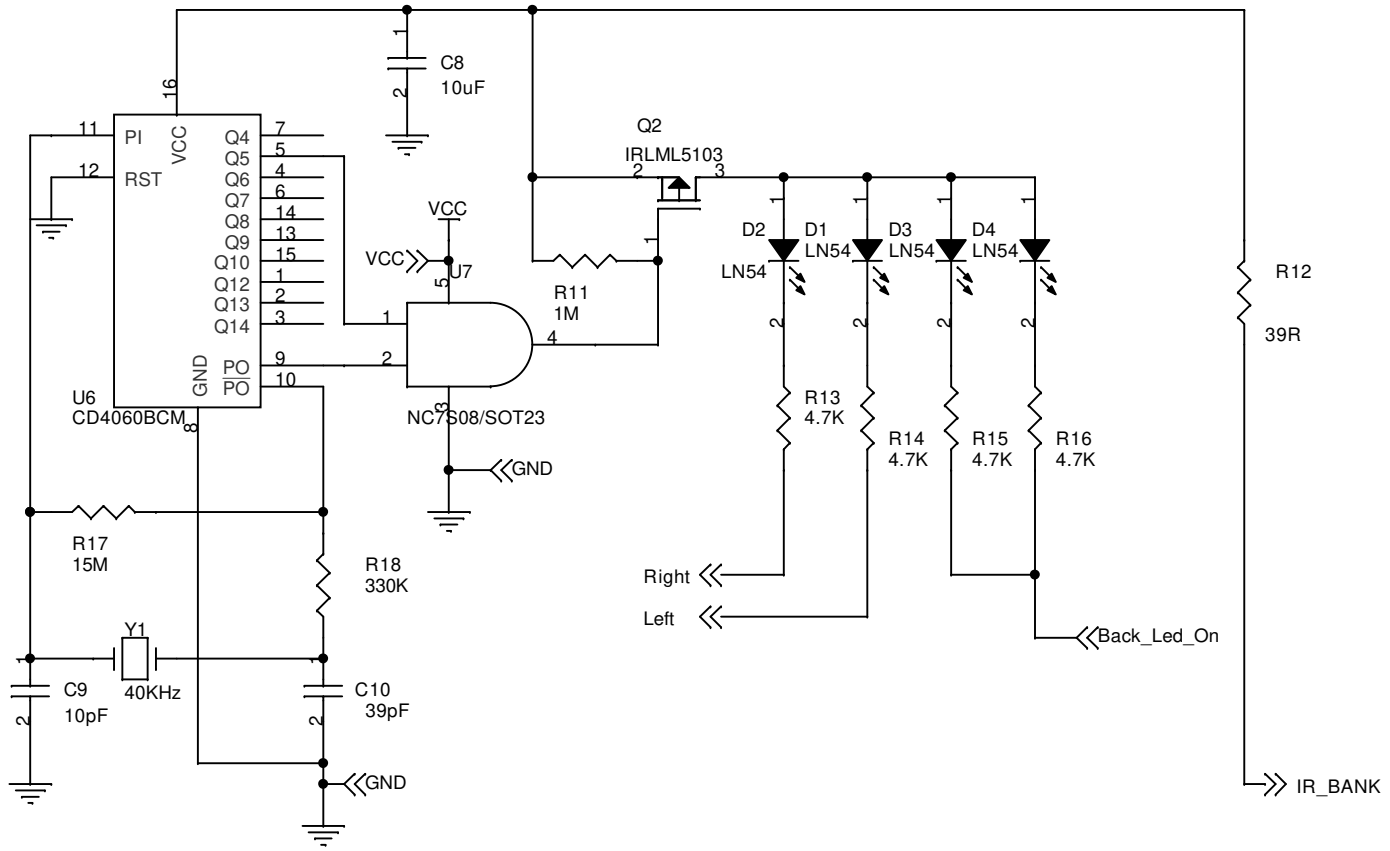

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Size: A	Document Number: Compass-IR_Board	Rev: 00
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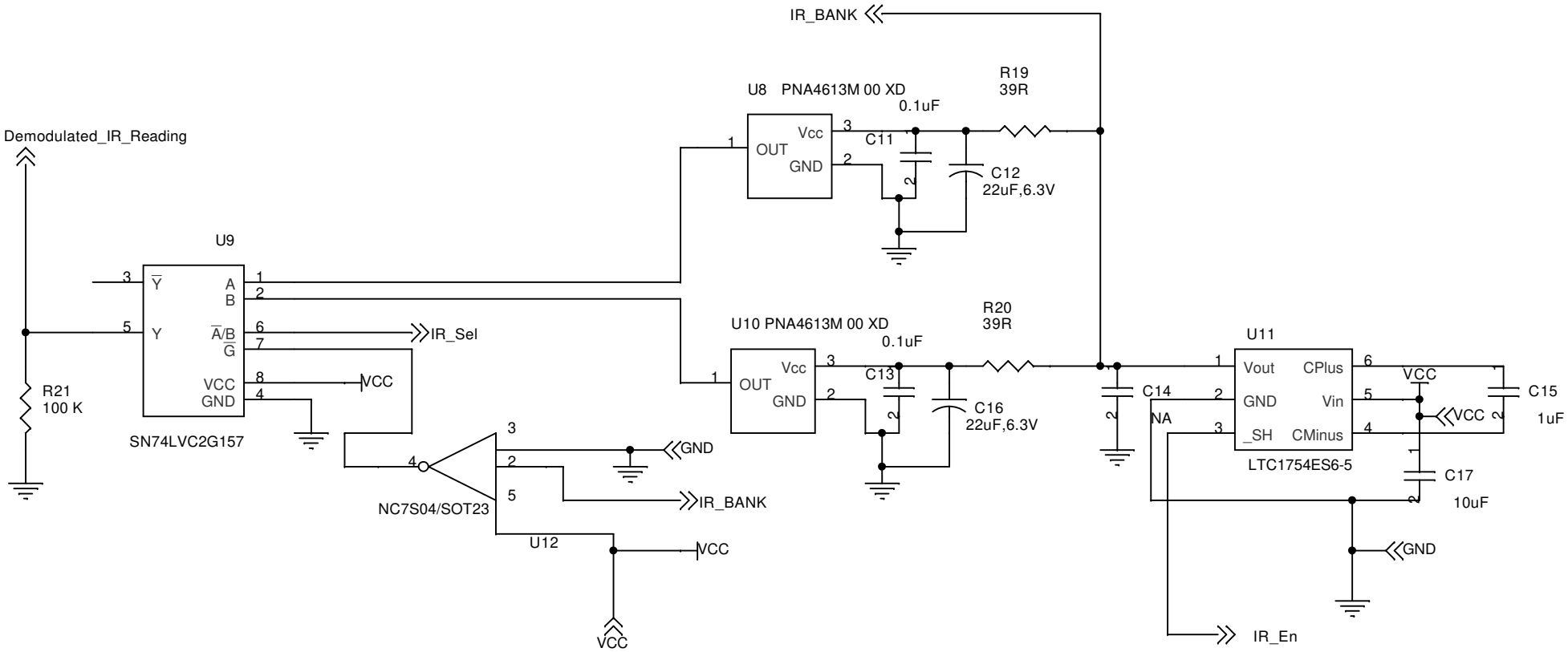

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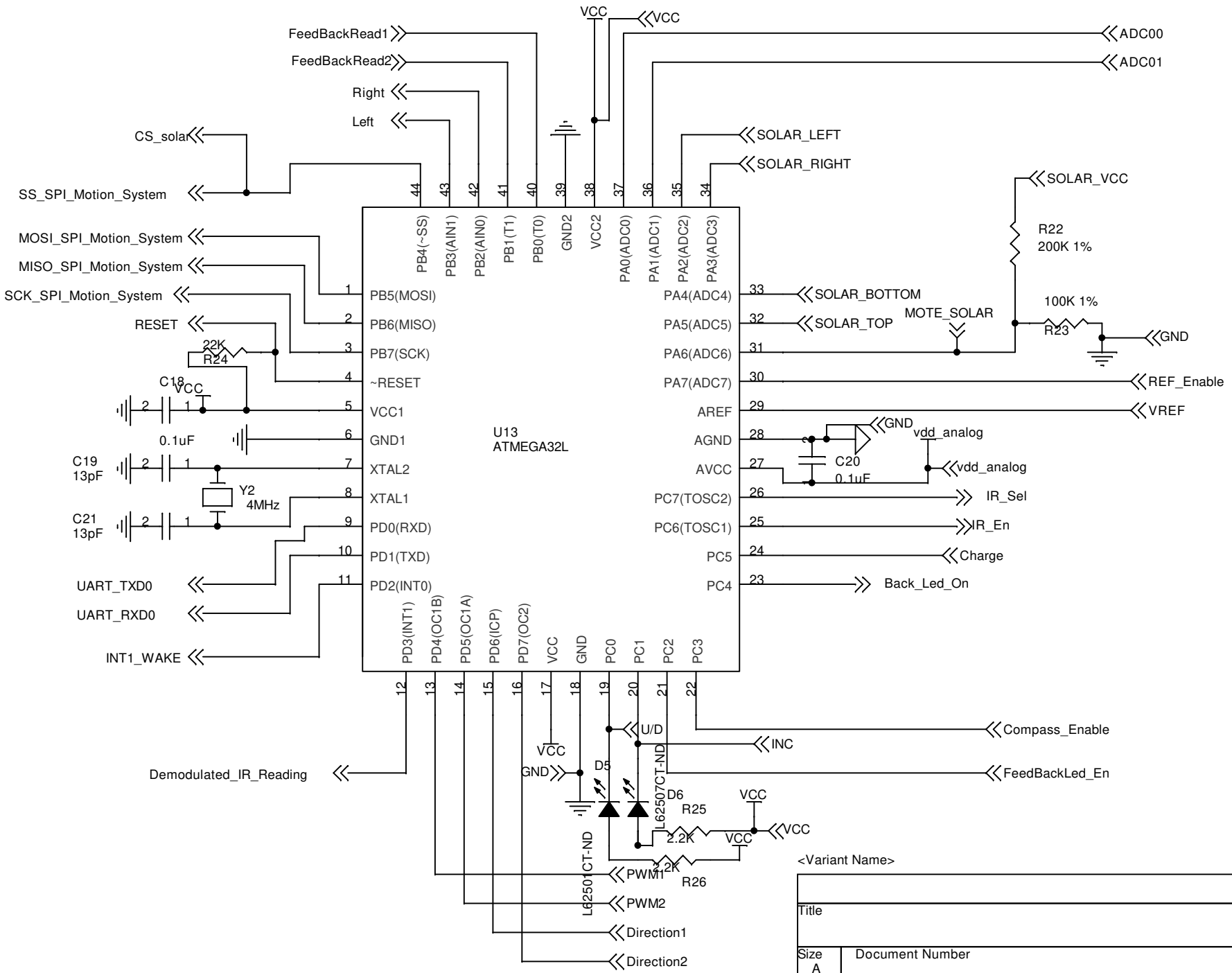
FeedBackRead1
FeedBackRead2
Right
Left
CS_solar
SS_SPI_Motion_System
MOSI_SPI_Motion_System
MISO_SPI_Motion_System
SCK_SPI_Motion_System
RESET
22K
R24
C18
0.1uF
C19
13pF
C21
13pF
Y2
4MHz
UART_TXD0
UART_RXD0
INT1_WAKE
Demodulated_IR_Reading
U13
ATMEGA32L
PB4(~SS)
PB3(AIN1)
PB2(AIN0)
PB1(T1)
PB0(T0)
GND2
VCC2
PA0(ADC0)
PA1(ADC1)
PA2(ADC2)
PA3(ADC3)
PB5(MOSI)
PB6(MISO)
PB7(SCK)
~RESET
VCC1
GND1
XTAL2
XTAL1
PD0(RXD)
PD1(TXD)
PD2(INT0)
PA4(ADC4)
PA5(ADC5)
PA6(ADC6)
PA7(ADC7)
AREF
AGND
AVCC
PC7(TOSC2)
PC6(TOSC1)
PC5
PC4
PD3(INT1)
PD4(OC1B)
PD5(OC1A)
PD6(ICP)
PD7(OC2)
VCC
GND
PC0
PC1
PC2
PC3
ADC00
ADC01
SOLAR_LEFT
SOLAR_RIGHT
SOLAR_VCC
R22
200K 1%
100K 1%
R23
MOTE_SOLAR
GND
SOLAR_BOTTOM
SOLAR_TOP
REF_Enable
VREF
C20
0.1uF
vdd_analog
IR_Sel
IR_En
Charge
Back_Led_On
U/D
INC
Compass_Enable
FeedBackLed_En
D5
D6
L62507CT-ND
R25
2.2K
R26
L62501CT-ND
PWM1
PWM2
Direction1
Direction2
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Size
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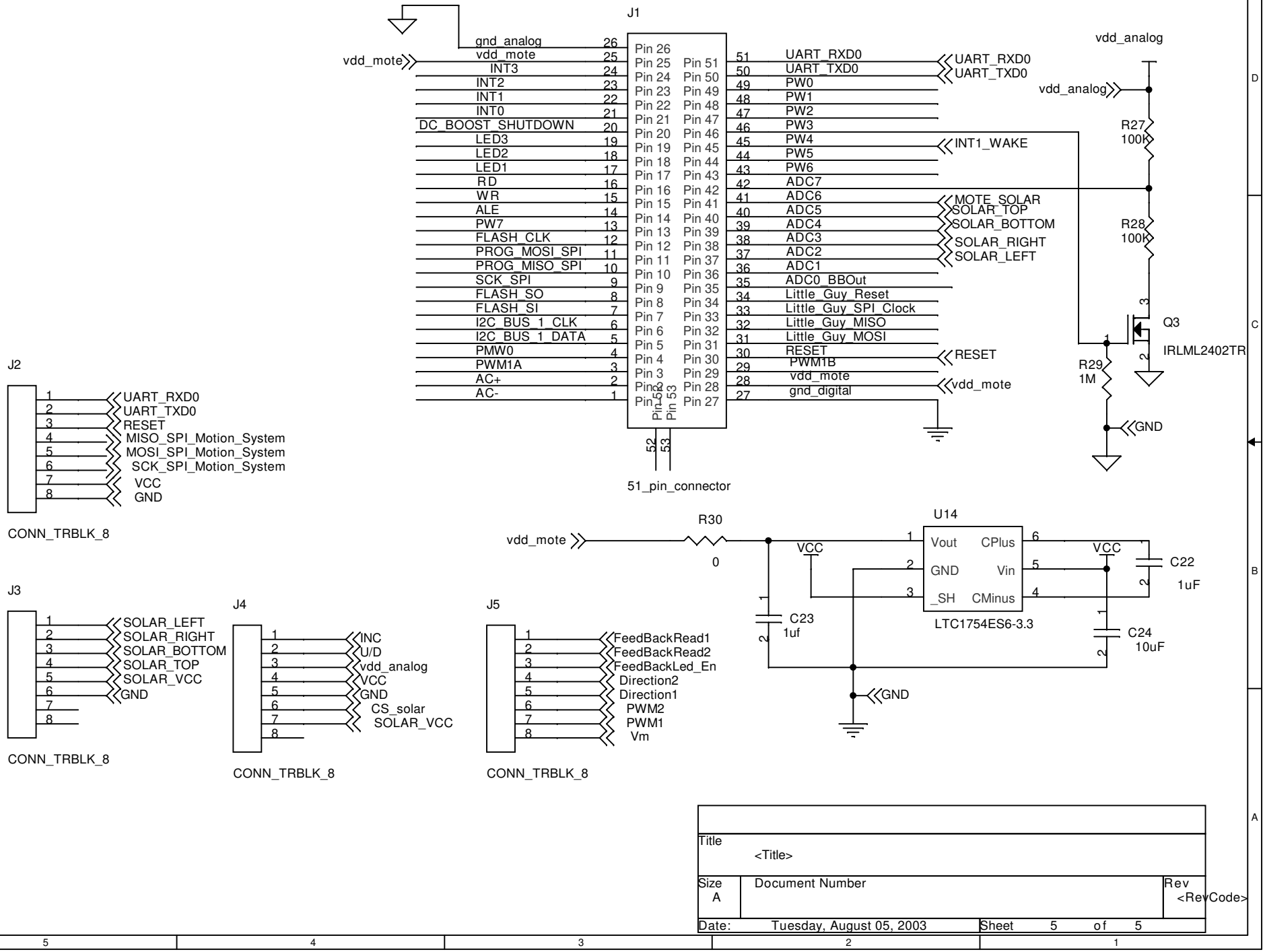
J1
gnd_analog 26
vdd_mote 25
INT3 24
INT2 23
INT1 22
INT0 21
DC_BOOST_SHUTDOWN 20
LED3 19
LED2 18
LED1 17
RD 16
WR 15
ALE 14
PW7 13
FLASH_CLK 12
PROG_MOSI_SPI 11
PROG_MISO_SPI 10
SCK_SPI 9
FLASH_SO 8
FLASH_SI 7
I2C_BUS_1_CLK 6
I2C_BUS_1_DATA 5
PMW0 4
PWM1A 3
AC+ 2
AC- 1
Pin 26
Pin 25 Pin 51
Pin 24 Pin 50
Pin 23 Pin 49
Pin 22 Pin 48
Pin 21 Pin 47
Pin 20 Pin 46
Pin 19 Pin 45
Pin 18 Pin 44
Pin 17 Pin 43
Pin 16 Pin 42
Pin 15 Pin 41
Pin 14 Pin 40
Pin 13 Pin 39
Pin 12 Pin 38
Pin 11 Pin 37
Pin 10 Pin 36
Pin 9 Pin 35
Pin 8 Pin 34
Pin 7 Pin 33
Pin 6 Pin 32
Pin 5 Pin 31
Pin 4 Pin 30
Pin 3 Pin 29
Pin 2 Pin 28
Pin 1 Pin 27
Pin 52
Pin 53
52
53
51_pin_connector
51 UART_RXD0
50 UART_TXD0
49 PW0
48 PW1
47 PW2
46 PW3
45 PW4
44 PW5
43 PW6
42 ADC7
41 ADC6
40 ADC5
39 ADC4
38 ADC3
37 ADC2
36 ADC1
35 ADC0_BBOut
34 Little_Guy_Reset
33 Little_Guy_SPI_Clock
32 Little_Guy_MISO
31 Little_Guy_MOSI
30 RESET
29 PWM1B
28 vdd_mote
27 gnd_digital
UART_RXD0
UART_TXD0
INT1_WAKE
MOTE_SOLAR
SOLAR_TOP
SOLAR_BOTTOM
SOLAR_RIGHT
SOLAR_LEFT
RESET
vdd_mote
vdd_mote
vdd_analog
vdd_analog
R27
100k
R28
100k
R29
1M
Q3
IRLML2402TR
GND
J2
1 UART_RXD0
2 UART_TXD0
3 RESET
4 MISO_SPI_Motion_System
5 MOSI_SPI_Motion_System
6 SCK_SPI_Motion_System
7 VCC
8 GND
CONN_TRBLK_8
J3
1 SOLAR_LEFT
2 SOLAR_RIGHT
3 SOLAR_BOTTOM
4 SOLAR_TOP
5 SOLAR_VCC
6 GND
7
8
CONN_TRBLK_8
J4
1 INC
2 U/D
3 vdd_analog
4 VCC
5 GND
6 CS_solar
7 SOLAR_VCC
8
CONN_TRBLK_8
J5
1 FeedBackRead1
2 FeedBackRead2
3 FeedBackLed_En
4 Direction2
5 Direction1
6 PWM2
7 PWM1
8 Vm
CONN_TRBLK_8
vdd_mote
R30
0
VCC
U14
Vout CPlus
GND Vin
_SH CMinus
LTC1754ES6-3.3
VCC
C22
1uF
C23
1uf
C24
10uF
GND
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<Title>
Size
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