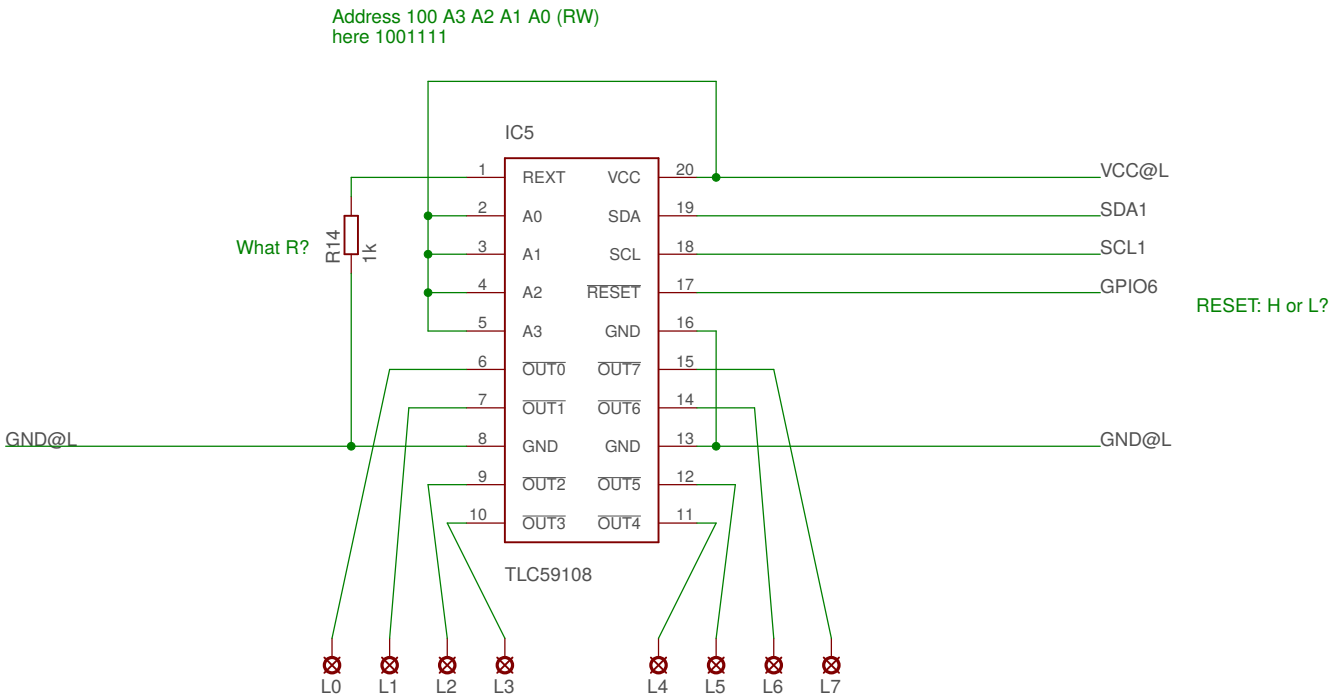
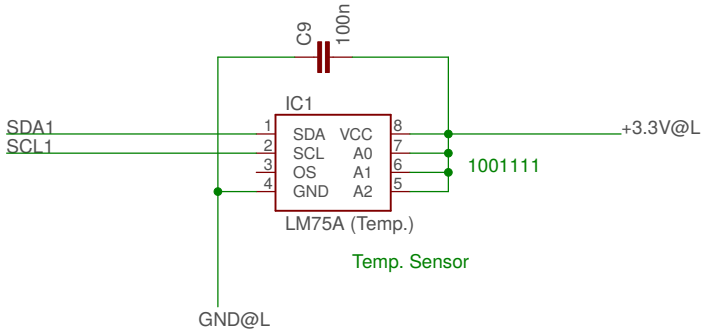


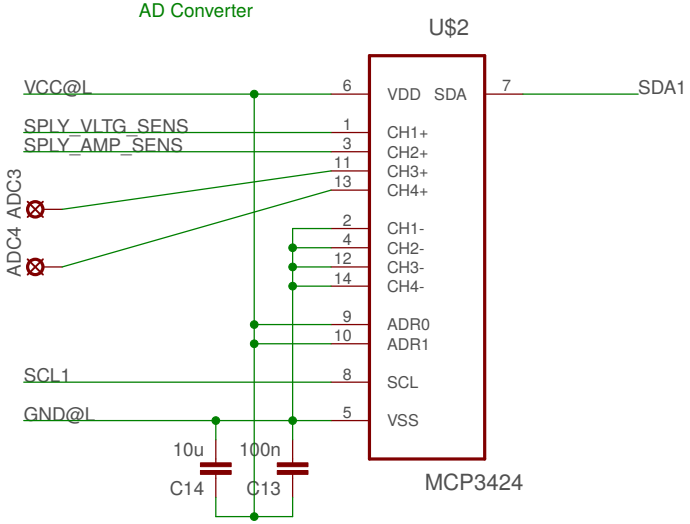
TITLE: Main		
Document Number:		REV:
Date: 08.10.16 17:21	Sheet: 1/1	

pull-up resistors for I2C already in the RPI

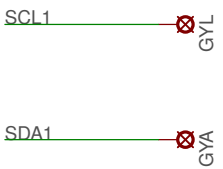
The four most significant bits of the slave address are hard wired inside the LM75 and are “1001”. The three least significant bits of the address are assigned to pins A2 –A0, and are set by connecting these pins to ground for a low, (0); or to aVS for a high, (1).



AD Converter



Address 1101 A2 A1 A0
used with floting/open, H and L
here: 1101 110
(ADDR0=ADDR1=H)

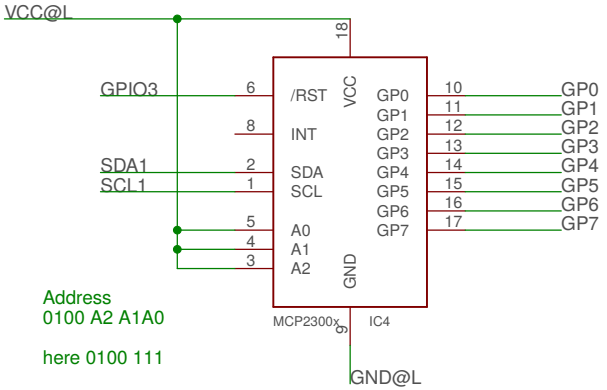


ITG-3200 (3.3V)

Address
Deafault 0x69= 1101 001

TITLE: Main		
Document Number:		REV:
Date: 08.10.16 17:21	Sheet: 1/1	

PIEZO: http://www.reichelt.de/SUMMER-12V-HL/3/index.html?&ACTION=3&LA=446&ARTICLE=14557&artnr=SUMMER+12V+HL&SEARCH=piezo+

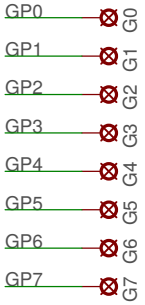


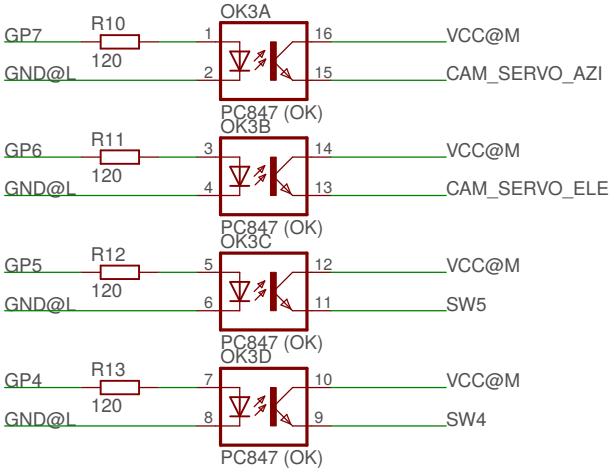
Address
0100 A2 A1A0

here 0100 111

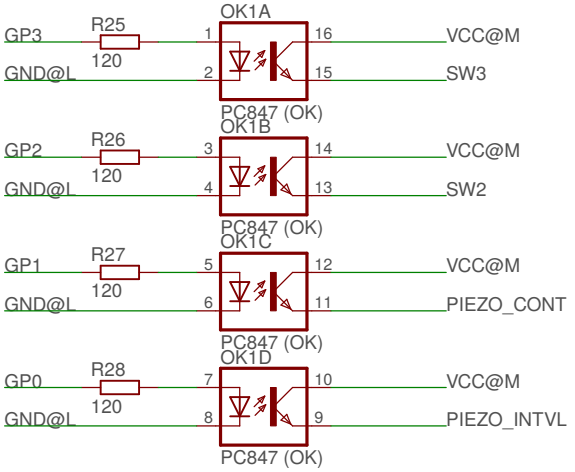
IR LEDs
IR CAM: Angle of View: 54 x 41 degrees

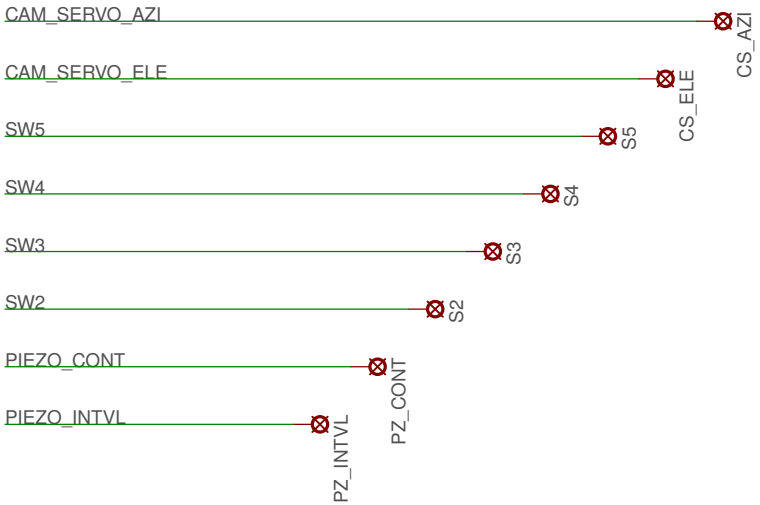
8-Bit I/O Expander with Serial Interface



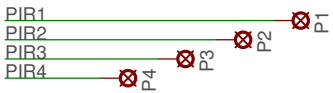


PC847: Ic_max=50mA

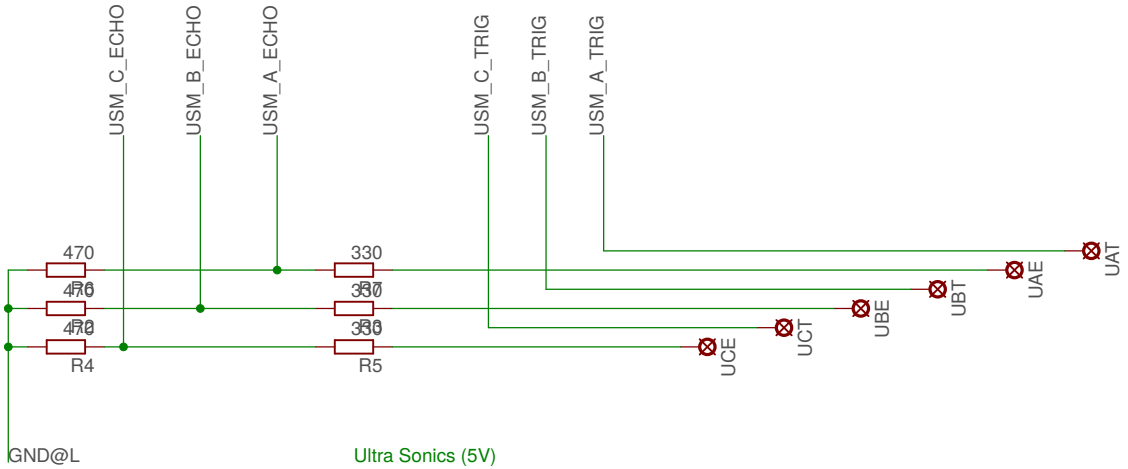




TITLE: Main		
Document Number:		REV:
Date: 08.10.16 17:21	Sheet: 1/1	

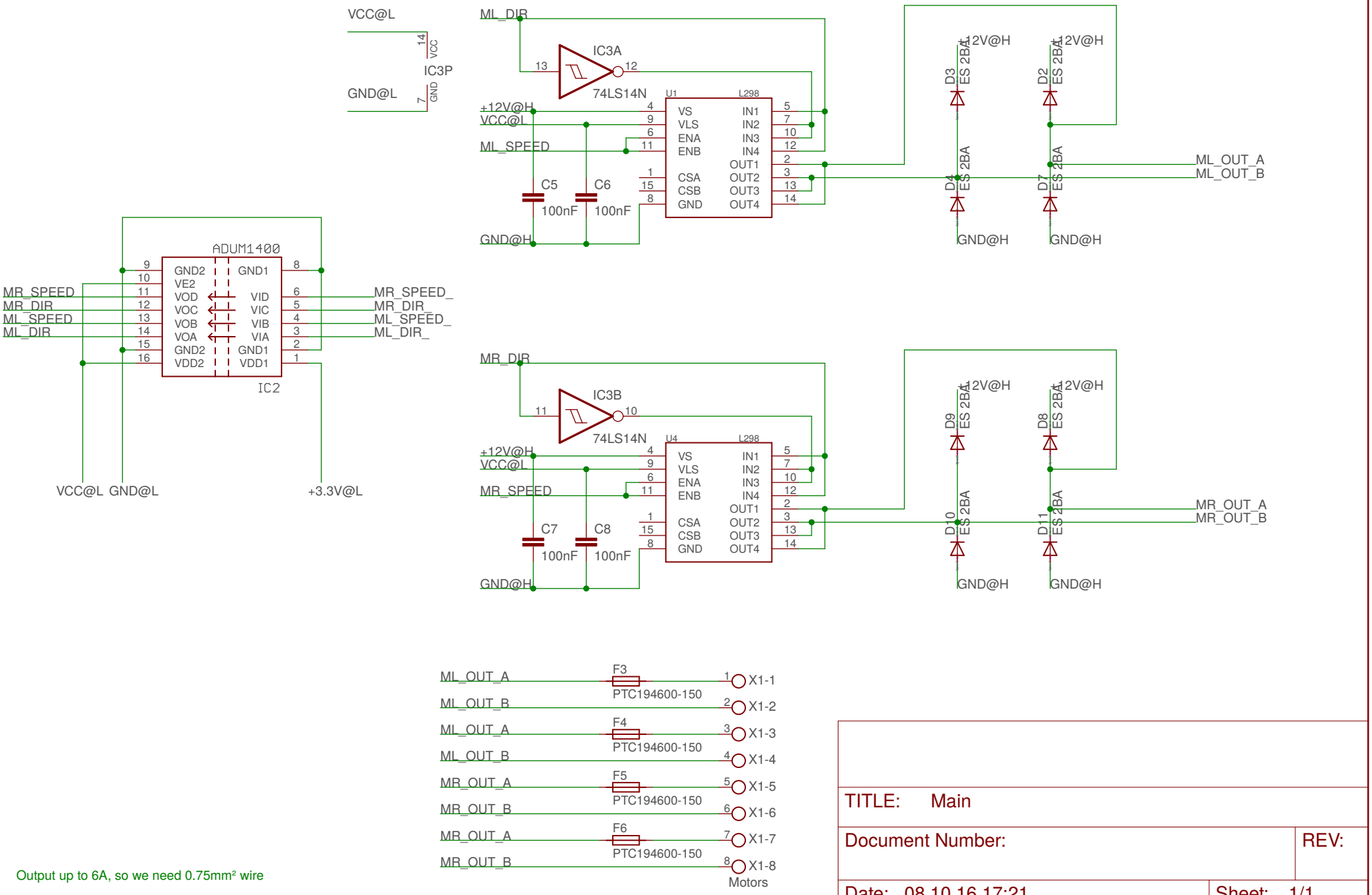


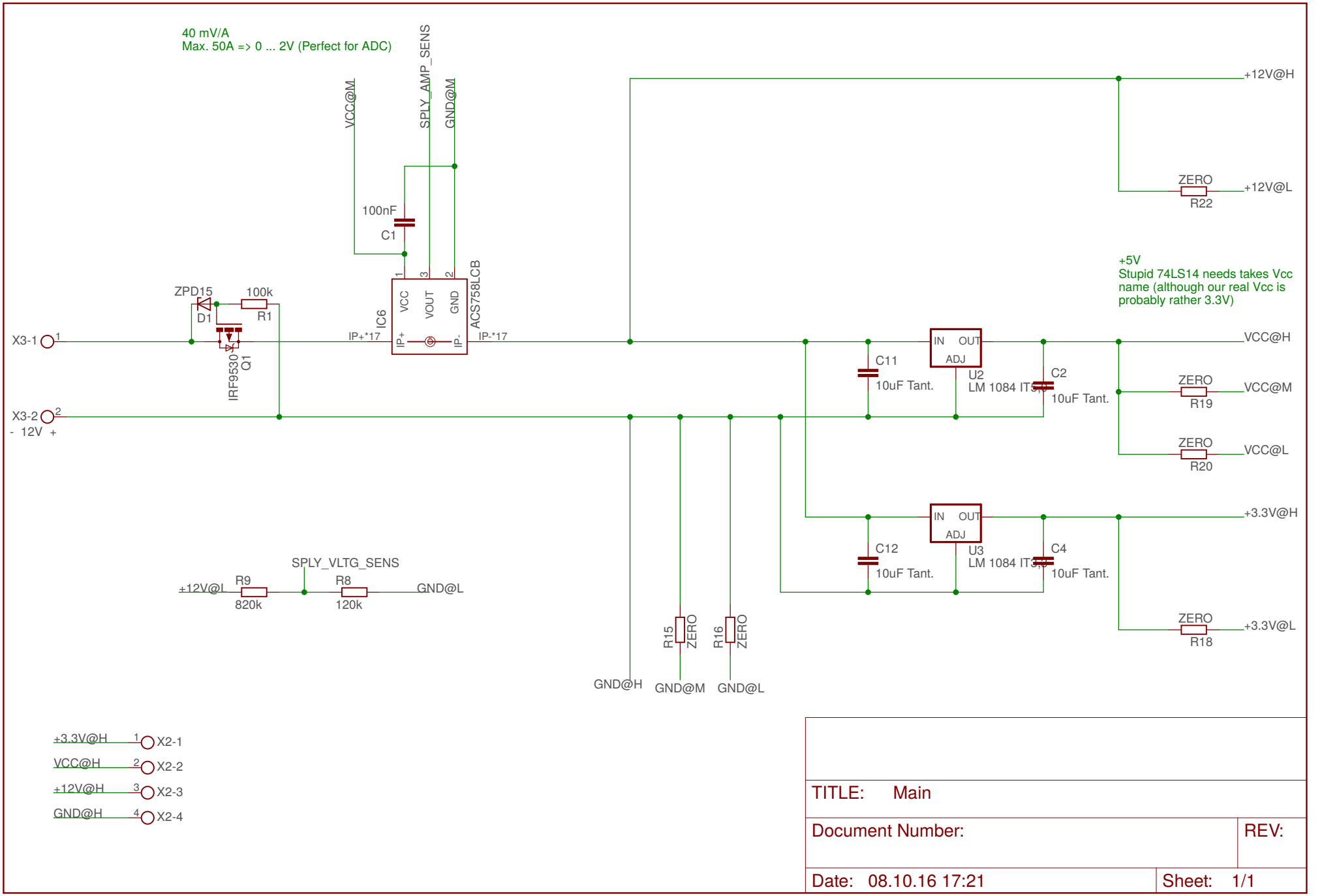
PIRs (5V)

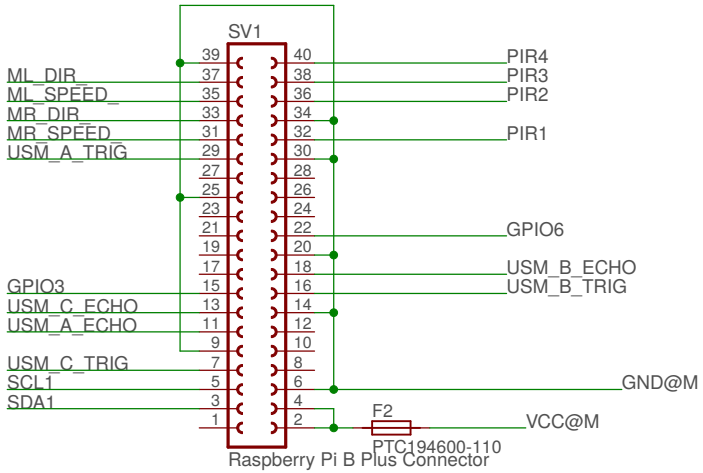


Ultra Sonics (5V)

TITLE: Main		
Document Number:		REV:
Date: 08.10.16 17:21	Sheet: 1/1	


VCC@L
14
VCC
IC3P
GND@L
7
GND
ML_DIR
IC3A
13
12
74LS14N
U1
L298
+12V@H
VCC@L
ML_SPEED
VS
VLS
ENA
ENB
CSA
CSB
GND
IN1
IN2
IN3
IN4
OUT1
OUT2
OUT3
OUT4
C5
C6
100nF
100nF
GND@H
D3
D2
D4
D7
ES 2BA
ML_OUT_A
ML_OUT_B
ADUM1400
GND2
VE2
VOD
VOC
VOB
VOA
GND2
VDD2
GND1
VID
VIC
VIB
VIA
GND1
VDD1
MR_SPEED
MR_DIR
ML_SPEED
ML_DIR
MR_SPEED_
MR_DIR_
ML_SPEED_
ML_DIR_
IC2
VCC@L GND@L
+3.3V@L
MR_DIR
IC3B
11
10
74LS14N
U4
L298
MR_SPEED
C7
C8
D9
D8
D10
D11
MR_OUT_A
MR_OUT_B
F3
F4
F5
F6
PTC194600-150
X1-1
X1-2
X1-3
X1-4
X1-5
X1-6
X1-7
X1-8
Motors
Output up to 6A, so we need 0.75mm² wire
TITLE: Main
Document Number:
REV:
Date: 08.10.16 17:21
Sheet: 1/1


40 mV/A
Max. 50A => 0 ... 2V (Perfect for ADC)
VCC@M
SPLY_AMP_SENS
GND@M
100nF
C1
ACS758LCB
IC6
VCC
VOUT
GND
IP+
IP-
IP+*17
IP-*17
ZPD15
D1
100k
R1
IRF9530
Q1
X3-1
X3-2
- 12V +
+12V@H
ZERO
R22
+12V@L
+5V
Stupid 74LS14 needs takes Vcc name (although our real Vcc is probably rather 3.3V)
C11
10uF Tant.
IN
OUT
ADJ
U2
LM 1084 IT5.0
C2
10uF Tant.
VCC@H
ZERO
R19
VCC@M
ZERO
R20
VCC@L
C12
10uF Tant.
U3
LM 1084 IT3.3
C4
10uF Tant.
+3.3V@H
ZERO
R18
+3.3V@L
SPLY_VLTG_SENS
+12V@L
R9
820k
R8
120k
GND@L
R15
ZERO
R16
ZERO
GND@H
GND@M
GND@L
+3.3V@H
VCC@H
+12V@H
GND@H
X2-1
X2-2
X2-3
X2-4
TITLE: Main
Document Number:
REV:
Date: 08.10.16 17:21
Sheet: 1/1



TITLE: Main		
Document Number:		REV:
Date: 08.10.16 17:21	Sheet: 1/1	