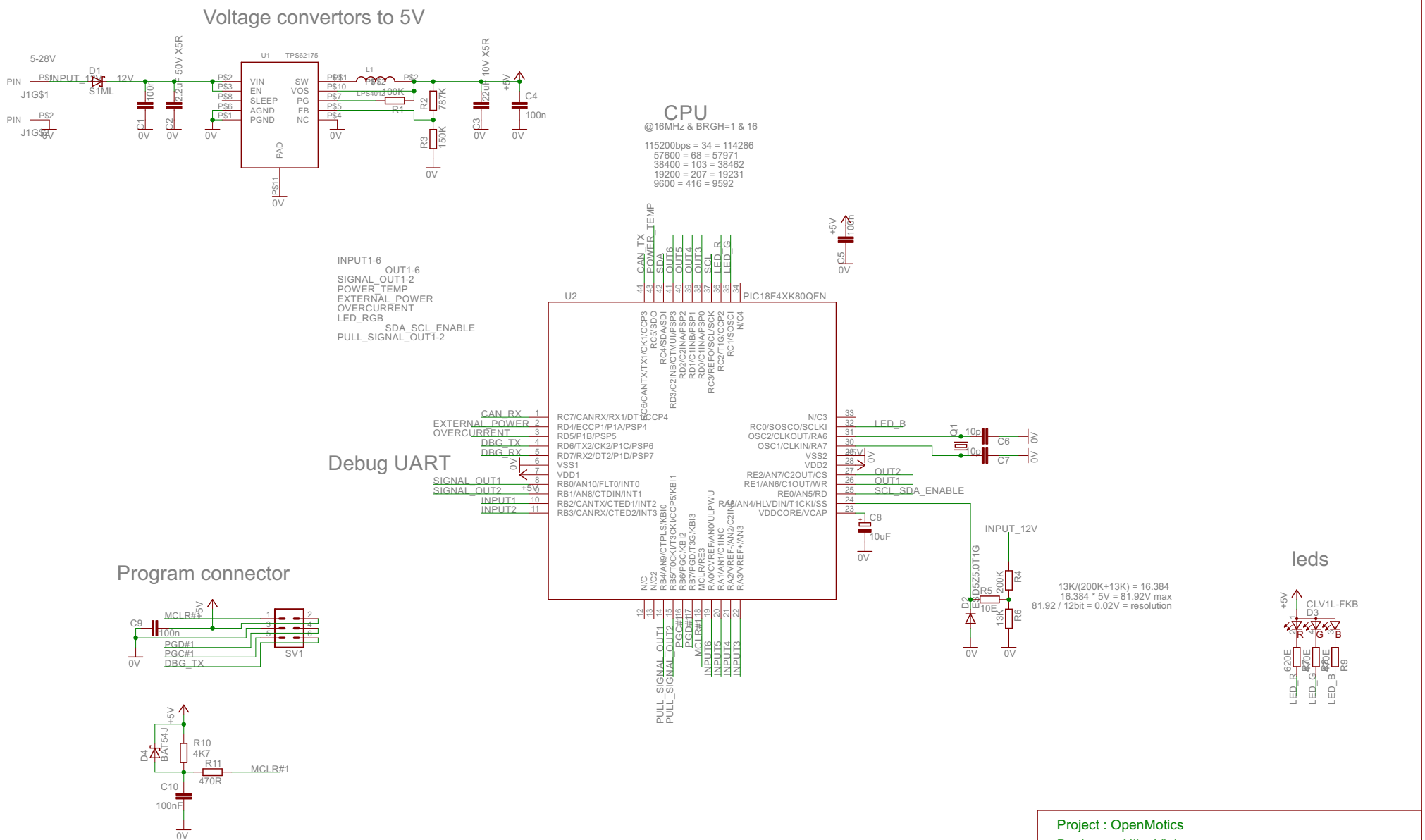
Voltage convertors to 5V
5-28V
PIN
J1G$1
D1
S1ML
12V
C1
100n
C2
2.2u
50V X5R
U1
TPS62175
VIN
EN
SLEEP
AGND
PGND
SW
VOS
PG
FB
NC
PAD
L1
LPS4012-100K
R1
R2
787K
R3
150K
C3
22uF
10V X5R
C4
100n
+5V
0V
CPU
@16MHz & BRGH=1 & 16
115200bps = 34 = 114286
57600 = 68 = 57971
38400 = 103 = 38462
19200 = 207 = 19231
9600 = 416 = 9592
INPUT1-6
OUT1-6
SIGNAL_OUT1-2
POWER_TEMP
EXTERNAL_POWER
OVERCURRENT
LED_RGB
SDA_SCL_ENABLE
PULL_SIGNAL_OUT1-2
U2
PIC18F4XK80QFN
CAN_TX
POWER_TEMP
SDA
OUT6
OUT5
OUT4
OUT3
SCL
LED_R
LED_G
C5
100n
CAN_RX
EXTERNAL_POWER
OVERCURRENT
DBG_TX
DBG_RX
SIGNAL_OUT1
SIGNAL_OUT2
INPUT1
INPUT2
Debug UART
LED_B
Q1
10p
C6
C7
OUT2
OUT1
SCL_SDA_ENABLE
C8
10uF
INPUT_12V
D2
ERD5Z5.0T1G
10K
R5
200K
R4
13K
R6
13K/(200K+13K) = 16.384
16.384 * 5V = 81.92V max
81.92 / 12bit = 0.02V = resolution
PULL_SIGNAL_OUT1
PULL_SIGNAL_OUT2
PGD#1
MCLR#1
INPUT6
INPUT5
INPUT4
INPUT3
Program connector
C9
100n
MCLR#1
PGD#1
PGC#1
DBG_TX
SV1
D4
BAT54J
R10
4K7
R11
470R
C10
100nF
leds
CLV1L-FKB
D3
LED_R
LED_G
LED_B
620E
R7
R8
R9
Project : OpenMotics
Designer : Niko Vinken
TITLE: OMHBN_3_1
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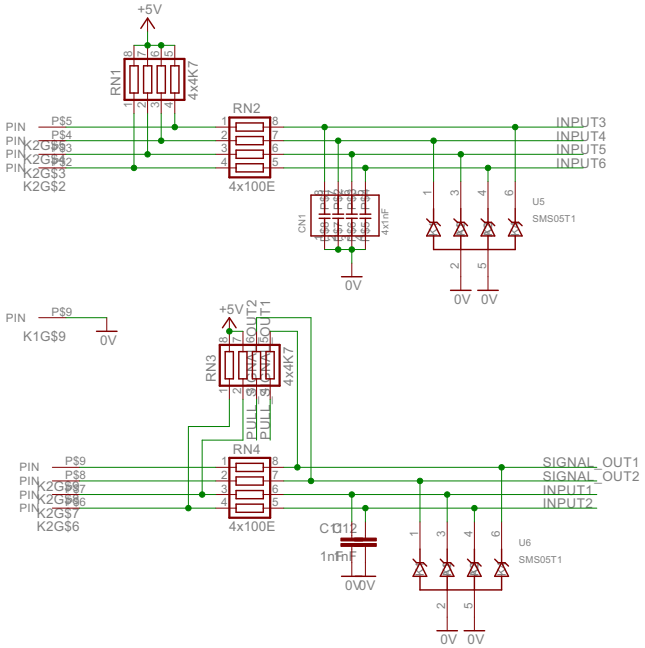
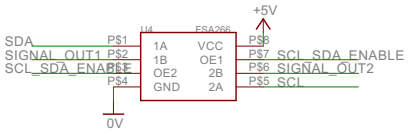
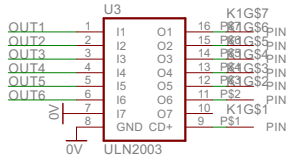
input protection



sensor output selection

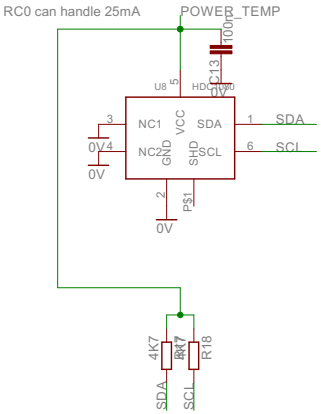


LED output control

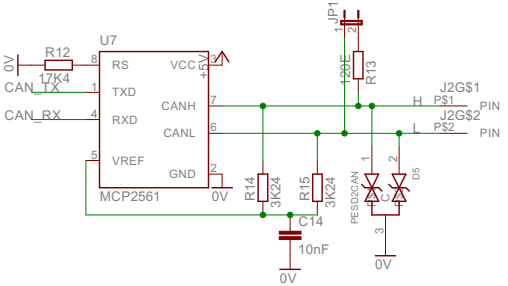


Humidity and temp sensor

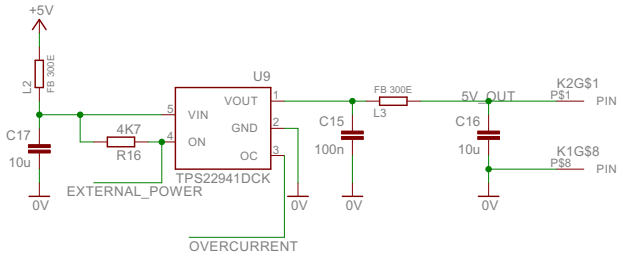
HDC1080 address: 1000-000X



CAN convertor



External power with currentlimit 40mA max



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