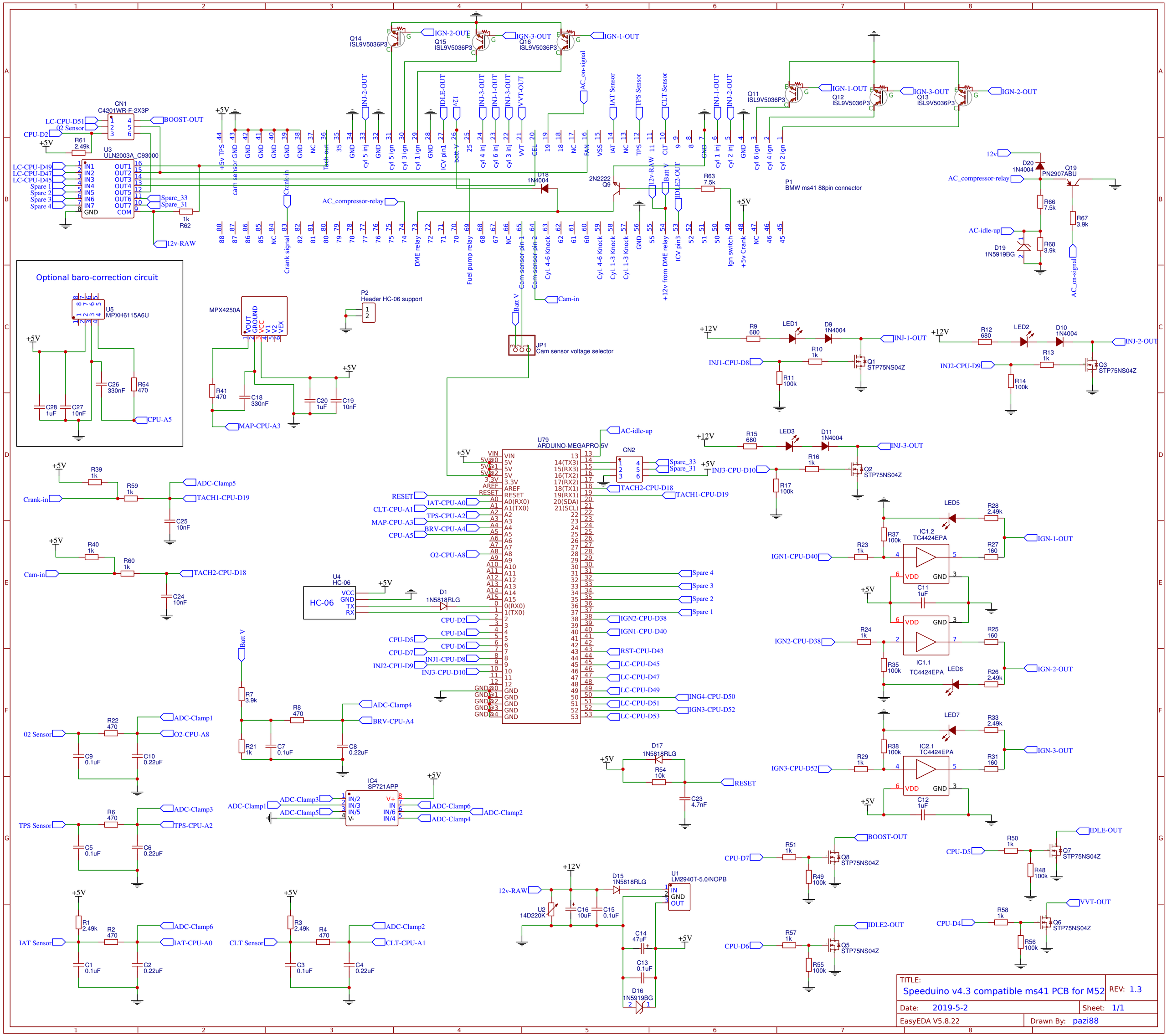
Optional baro-correction circuit
U5
MPXH6115A6U
C28
1uF
C27
10nF
C26
330nF
R64
470
CPU-A5
MPX4250A
VOUT
GROUND
VCC
V1
V2
VEX
R41
470
C18
330nF
C20
1uF
C19
10nF
MAP-CPU-A3
P2
Header HC-06 support
JP1
Cam sensor voltage selector
Batt V
Cam-in
CN1
C4201WR-F-2X3P
LC-CPU-D51
O2 Sensor
CPU-D2
BOOST-OUT
R61
2.49k
U3
ULN2003A_C93000
LC-CPU-D49
LC-CPU-D47
LC-CPU-D45
Spare 1
Spare 2
Spare 3
Spare 4
Spare_33
Spare_31
R62
1k
12v-RAW
Q14
ISL9V5036P3
Q15
ISL9V5036P3
Q16
ISL9V5036P3
IGN-2-OUT
IGN-3-OUT
IGN-1-OUT
Q11
ISL9V5036P3
Q12
ISL9V5036P3
Q13
ISL9V5036P3
D18
1N4004
2N2222
Q9
R63
7.5k
AC_compressor-relay
AC_on-signal
P1
BMW ms41 88pin connector
12v
D20
1N4004
Q19
PN2907ABU
R66
7.5k
R67
3.9k
AC-idle-up
D19
1N5919BG
R68
3.9k
Crank-in
Crank signal
DME relay
Fuel pump relay
Cam sensor pin 1
Cam sensor pin 2
Cyl. 4-6 Knock
Cyl. 1-3 Knock
+12v from DME relay
ICV pin3
Ign switch
+5v Crank
U79
ARDUINO-MEGAPRO-5V
CN2
Spare_33
Spare_31
TACH2-CPU-D18
TACH1-CPU-D19
RESET
IAT-CPU-A0
CLT-CPU-A1
TPS-CPU-A2
MAP-CPU-A3
BRV-CPU-A4
CPU-A5
O2-CPU-A8
Spare 4
Spare 3
Spare 2
Spare 1
IGN2-CPU-D38
IGN1-CPU-D40
RST-CPU-D43
LC-CPU-D45
LC-CPU-D47
LC-CPU-D49
ING4-CPU-D50
LC-CPU-D51
IGN3-CPU-D52
LC-CPU-D53
U4
HC-06
VCC
GND
TX
RX
D1
1N5818RLG
CPU-D2
CPU-D4
CPU-D5
CPU-D6
CPU-D7
INJ1-CPU-D8
INJ2-CPU-D9
INJ3-CPU-D10
R9
680
LED1
D9
1N4004
INJ-1-OUT
R10
1k
Q1
STP75NS04Z
R11
100k
INJ1-CPU-D8
R12
680
LED2
D10
1N4004
INJ-2-OUT
R13
1k
Q3
STP75NS04Z
R14
100k
INJ2-CPU-D9
R15
680
LED3
D11
1N4004
INJ-3-OUT
R16
1k
Q2
STP75NS04Z
R17
100k
INJ3-CPU-D10
R39
1k
R59
1k
ADC-Clamp5
TACH1-CPU-D19
C25
10nF
R40
1k
R60
1k
TACH2-CPU-D18
C24
10nF
R7
3.9k
R8
470
ADC-Clamp4
BRV-CPU-A4
R21
1k
C7
0.1uF
C8
0.22uF
R22
470
ADC-Clamp1
O2-CPU-A8
C9
0.1uF
C10
0.22uF
IC4
SP721APP
ADC-Clamp3
ADC-Clamp5
ADC-Clamp6
ADC-Clamp2
R6
470
TPS Sensor
TPS-CPU-A2
C5
0.1uF
C6
0.22uF
D17
1N5818RLG
R54
10k
C23
4.7nF
R1
2.49k
R2
470
IAT Sensor
IAT-CPU-A0
C1
0.1uF
C2
0.22uF
R3
2.49k
R4
470
CLT Sensor
CLT-CPU-A1
C3
0.1uF
C4
0.22uF
12v-RAW
U2
14D220K
C16
10uF
C15
0.1uF
D15
1N5818RLG
U1
LM2940T-5.0/NOPB
IN
GND
OUT
C14
47uF
C13
0.1uF
D16
1N5919BG
R51
1k
Q8
STP75NS04Z
R49
100k
CPU-D7
BOOST-OUT
R50
1k
Q7
STP75NS04Z
R48
100k
CPU-D5
IDLE-OUT
R57
1k
Q5
STP75NS04Z
R55
100k
CPU-D6
IDLE2-OUT
R58
1k
Q6
STP75NS04Z
R56
100k
CPU-D4
VVT-OUT
LED5
R28
2.49k
R37
100k
IC1.2
TC4424EPA
R23
1k
R27
160
IGN1-CPU-D40
IGN-1-OUT
C11
1uF
R24
1k
R25
160
IGN2-CPU-D38
R35
100k
IC1.1
TC4424EPA
LED6
R26
2.49k
IGN-2-OUT
LED7
R33
2.49k
R38
100k
IC2.1
TC4424EPA
R29
1k
R31
160
IGN3-CPU-D52
IGN-3-OUT
C12
1uF
TITLE:
Speeduino v4.3 compatible ms41 PCB for M52
REV: 1.3
Date: 2019-5-2
Sheet: 1/1
EasyEDA V5.8.22
Drawn By: pazi88