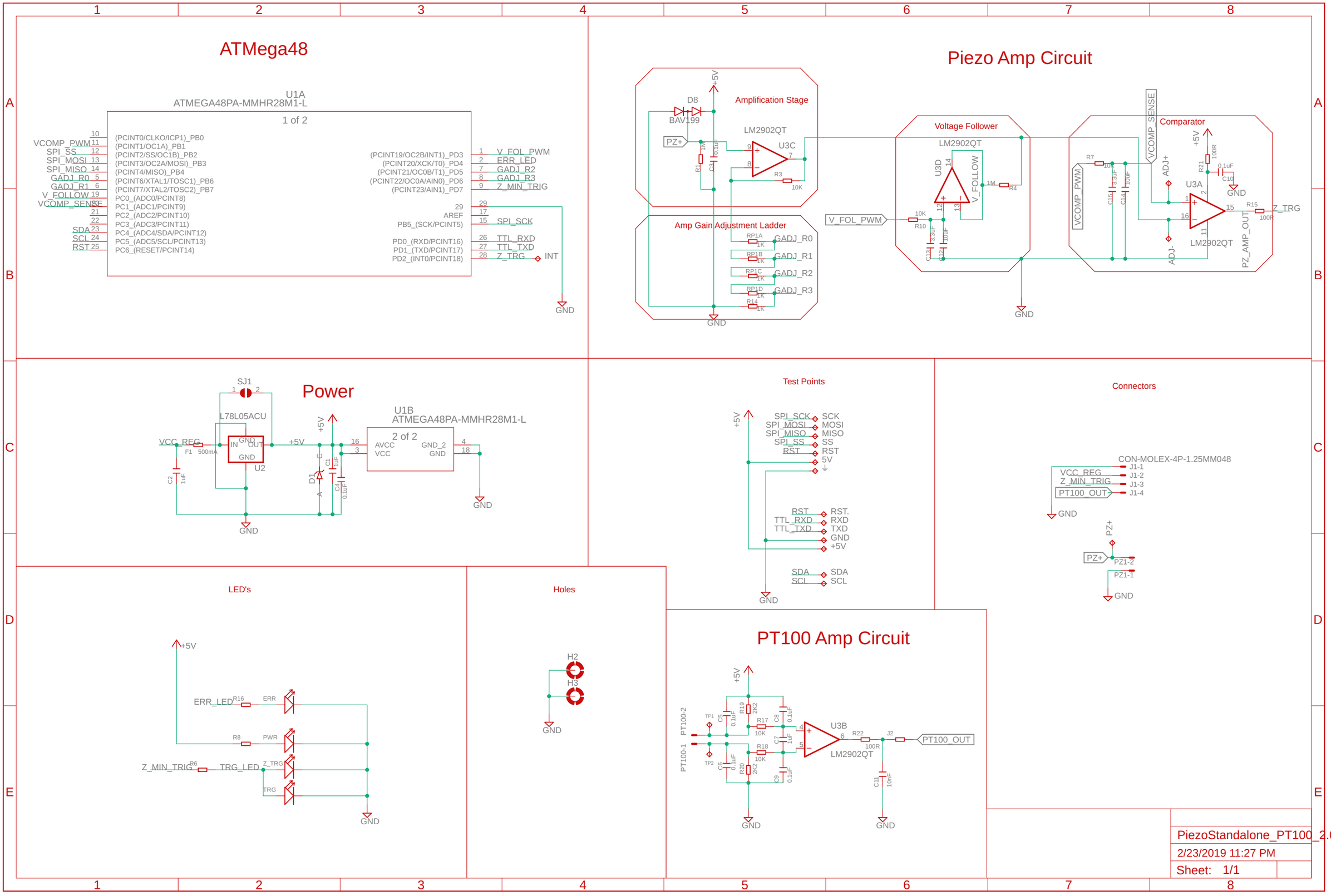
ATMega48
U1A
ATMEGA48PA-MMHR28M1-L
1 of 2
(PCINT0/CLKO/ICP1)_PB0
(PCINT1/OC1A)_PB1
(PCINT2/SS/OC1B)_PB2
(PCINT3/OC2A/MOSI)_PB3
(PCINT4/MISO)_PB4
(PCINT6/XTAL1/TOSC1)_PB6
(PCINT7/XTAL2/TOSC2)_PB7
PC0_(ADC0/PCINT8)
PC1_(ADC1/PCINT9)
PC2_(ADC2/PCINT10)
PC3_(ADC3/PCINT11)
PC4_(ADC4/SDA/PCINT12)
PC5_(ADC5/SCL/PCINT13)
PC6_(RESET/PCINT14)
(PCINT19/OC2B/INT1)_PD3
(PCINT20/XCK/T0)_PD4
(PCINT21/OC0B/T1)_PD5
(PCINT22/OC0A/AIN0)_PD6
(PCINT23/AIN1)_PD7
AREF
PB5_(SCK/PCINT5)
PD0_(RXD/PCINT16)
PD1_(TXD/PCINT17)
PD2_(INT0/PCINT18)
VCOMP_PWM
SPI_SS
SPI_MOSI
SPI_MISO
GADJ_R0
GADJ_R1
V_FOLLOW
VCOMP_SENSE
SDA
SCL
RST
V_FOL_PWM
ERR_LED
GADJ_R2
GADJ_R3
Z_MIN_TRIG
SPI_SCK
TTL_RXD
TTL_TXD
Z_TRG
INT
GND
Piezo Amp Circuit
Amplification Stage
D8
BAV199
PZ+
LM2902QT
U3C
R1
C3
R3
10K
Amp Gain Adjustment Ladder
RP1A
RP1B
RP1C
RP1D
R14
1K
GADJ_R0
GADJ_R1
GADJ_R2
GADJ_R3
Voltage Follower
U3D
V_FOLLOW
R4
1M
R10
C14
C12
Comparator
U3A
R7
C15
C14
R21
100R
C10
0.1uF
R15
PZ_AMP_OUT
ADJ+
ADJ-
Power
SJ1
L78L05ACU
U2
VCC_REG
F1 500mA
C2
1uF
D1
C1
C4
0.1uF
U1B
ATMEGA48PA-MMHR28M1-L
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AVCC
VCC
GND_2
Test Points
SCK
MOSI
MISO
SS
RST
5V
RST.
RXD
TXD
SDA
SCL
Connectors
CON-MOLEX-4P-1.25MM048
J1-1
J1-2
J1-3
J1-4
PZ1-2
PZ1-1
LED's
ERR_LED
R16
ERR
R8
PWR
Z_MIN_TRIG
R6
TRG_LED
Z_TRG
TRG
Holes
H2
H3
PT100 Amp Circuit
PT100-2
PT100-1
TP1
TP2
C5
C6
R19
R20
2K2
R17
R18
10K
C8
C9
C7
0.1uF
1uF
U3B
LM2902QT
R22
100R
J2
PT100_OUT
C11
10nF
PiezoStandalone_PT100_2.0.0
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