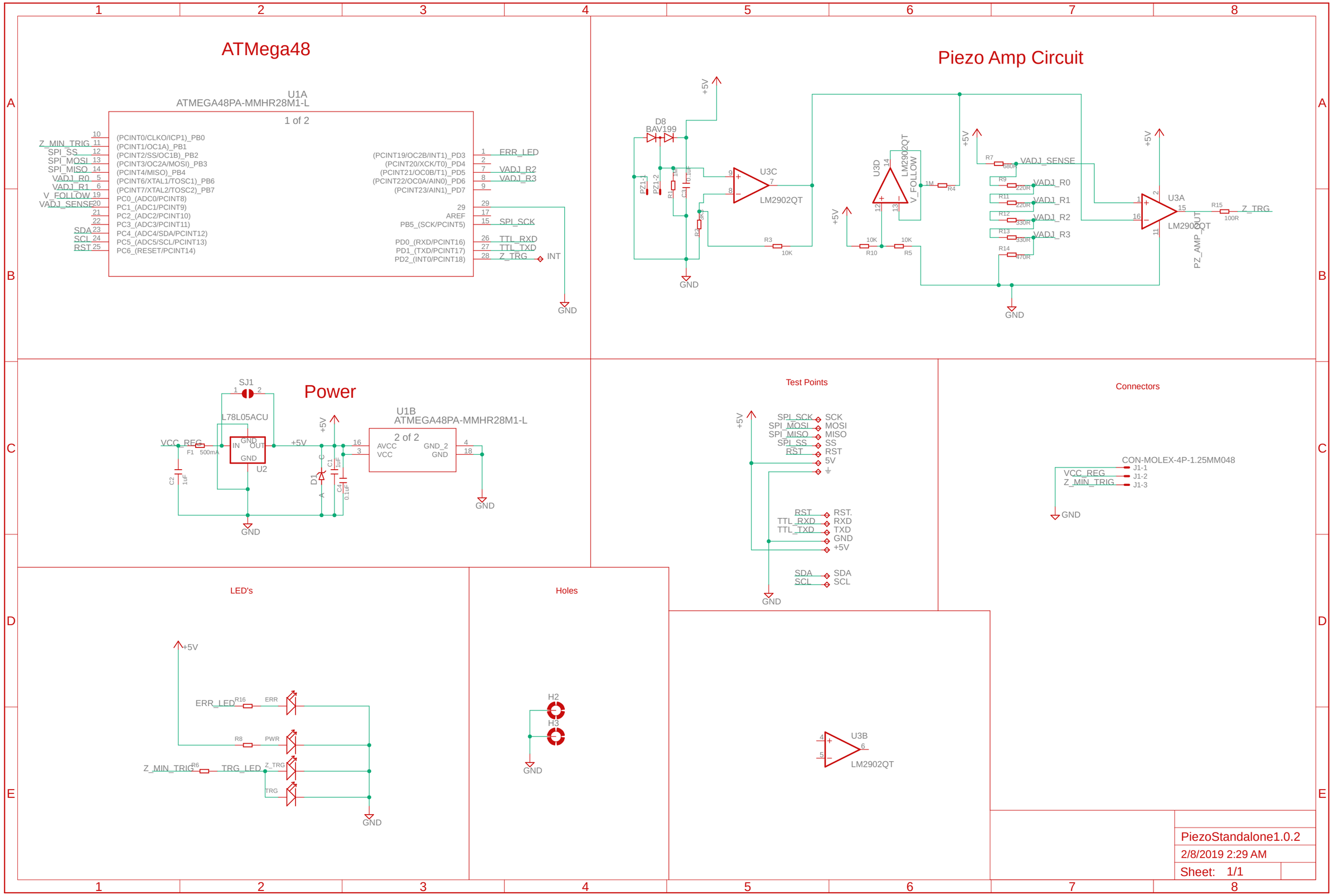
ATMega48
U1A
ATMEGA48PA-MMHR28M1-L
1 of 2
(PCINT0/CLKO/ICP1)_PB0
(PCINT1/OC1A)_PB1
(PCINT2/SS/OC1B)_PB2
(PCINT3/OC2A/MOSI)_PB3
(PCINT4/MISO)_PB4
(PCINT6/XTAL1/TOSC1)_PB6
(PCINT7/XTAL2/TOSC2)_PB7
PC0_(ADC0/PCINT8)
PC1_(ADC1/PCINT9)
PC2_(ADC2/PCINT10)
PC3_(ADC3/PCINT11)
PC4_(ADC4/SDA/PCINT12)
PC5_(ADC5/SCL/PCINT13)
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)
Z_MIN_TRIG
SPI_SS
SPI_MOSI
SPI_MISO
VADJ_R0
VADJ_R1
V_FOLLOW
VADJ_SENSE
SDA
SCL
RST
ERR_LED
VADJ_R2
VADJ_R3
SPI_SCK
TTL_RXD
TTL_TXD
Z_TRG
INT
GND
Piezo Amp Circuit
+5V
D8
BAV199
PZ1-1
PZ1-2
R1
1M
C3
0.1uF
R2
8K2
U3C
LM2902QT
R3
10K
U3D
LM2902QT
V_FOLLOW
R4
1M
R10
10K
R5
10K
R7
680R
VADJ_SENSE
R9
220R
VADJ_R0
R11
220R
VADJ_R1
R12
330R
VADJ_R2
R13
330R
VADJ_R3
R14
470R
U3A
LM2902QT
R15
100R
Z_TRG
PZ_AMP_OUT
Power
SJ1
L78L05ACU
VCC_REG
F1
500mA
IN
OUT
GND
U2
C2
1uF
D1
C1
1uF
C4
0.1uF
U1B
ATMEGA48PA-MMHR28M1-L
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AVCC
VCC
GND_2
GND
Test Points
SPI_SCK
SPI_MOSI
SPI_MISO
SPI_SS
RST
5V
SCK
MOSI
MISO
SS
RST
RST
TTL_RXD
TTL_TXD
RST.
RXD
TXD
GND
+5V
SDA
SCL
SDA
SCL
Connectors
CON-MOLEX-4P-1.25MM048
VCC_REG
Z_MIN_TRIG
J1-1
J1-2
J1-3
LED's
ERR_LED
R16
ERR
R8
PWR
Z_MIN_TRIG
R6
TRG_LED
Z_TRG
TRG
Holes
H2
H3
U3B
LM2902QT
PiezoStandalone1.0.2
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