5V

SELF_PROG

R5 1K   R6 1K

LED1 RED   LED2 GREEN

R4 10K

SLOW_SCK

5V

C1 10u

GND

1 IC1
PC6(/RESET)

C3 22p
Q1 12M
9 PB6(TOSC1)

C4 22p
10 PB7(TOSC2)

GND

PTC1

R3 2K2

USB
VBUS
GND
D+
D-

R1 68R   D+
R2 68R   D-

D1 3V6   D2 3V6

GND

7 VCC
20 AVCC
21 AREF

C2 100n

8 GND
22 AGND

GND

PC0(ADC0) 23
PC1(ADC1) 24
PC2(ADC2) 25
PC3(ADC3) 26
PC4(ADC4/SDA) 27
PC5(ADC5/SCL) 28

PD0(RXD) 2
PD1(TXD) 3
PD2(INT0) 4 D+
PD3(INT1) 5
PD4(XCK/T0) 6
PD5(T1) 11
PD6(AIN0) 12
PD7(AIN1) 13

PB0(ICP1) 14 D-
PB1(OC1A) 15 D+
PB2(SS/OC1B) 16 RESET_TARGET
PB3(MOSI/OC2A) 17 MOSI
PB4(MISO) 18 MISO
PB5(SCK) 19 SCK

AVR-MEGA48PTH

1
2
JP3
GND

5V VDD

JP1
2
1
SUPPLY_TARGET

JP2
2 SELF_PROG
1 RESET_TARGET
SELF_PROGRAM

CN2
MISO MISO 1 2 +5
SCK SCK 3 4 MOSI MOSI
RESET_TARGE RESET 5 6 GND
ISP

VDD

GND