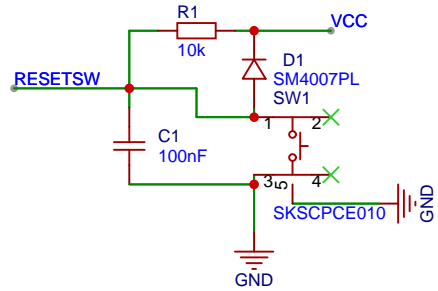
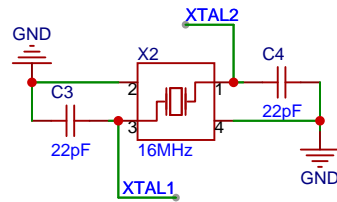


# ATMEGA RESET SWITCH

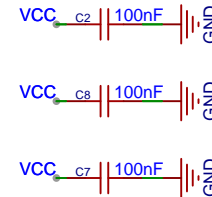


### CRYSTAL OSCILLATOR 16.000MHz

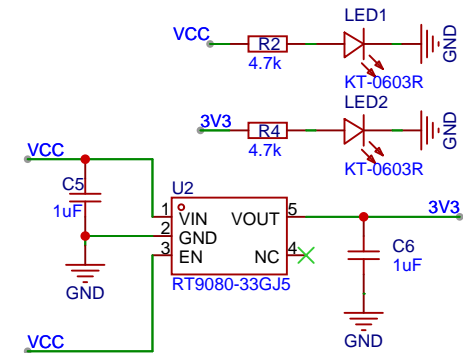
The diagram shows a 16.000MHz crystal oscillator circuit. The crystal component, labeled X2, has four pins. Pin 2 is connected to a ground symbol (GND) through a 22pF capacitor (C3). Pin 1 is connected to a terminal labeled XTAL2. Pin 3 is connected to a terminal labeled XTAL1. Pin 4 is connected to a ground symbol (GND) through a 22pF capacitor (C4).



# Decoupling Cap



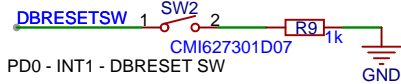
# RT9080 3.3V REGULATOR



## FINGERPRINT DB RESET SWITCH

DBRESETSW 1 SW2 2 CM1627301D07 1k R9 GND

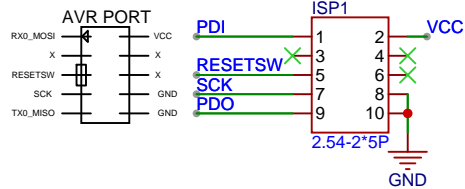
PD0 - INT1 - DBRESET SW



# AVR FIRMWARE UPLOAD PORT

The diagram illustrates the AVR Firmware Upload Port. It shows the connection between the AVR PORT and the ISP1 header. The AVR PORT pins are RX0\_MOSI, RESETSW, SCK, and TX0\_MISO. The ISP1 pins are 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10. The connections are as follows:

- PDI (green) to pin 1
- RESETSW (blue) to pin 3
- SCK (green) to pin 5
- PDO (green) to pin 9
- Pin 2 is connected to VCC (blue)
- Pins 4, 6, and 8 are connected to GND (blue)
- Pin 10 is connected to GND (blue) and has a 2.54-2\*5P label



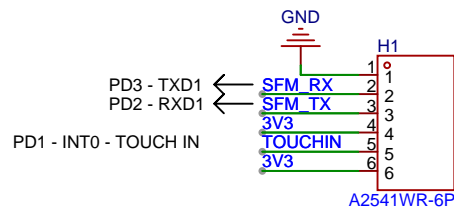
# FINGERPRINT MODULE HEADER

The diagram illustrates the pin connections for the fingerprint module header. It shows a 6-pin header with the following connections:

- Pin 1:** GND (Ground)
- Pin 2:** SFM RX (Serial Fingerprint Module Receive)
- Pin 3:** SFM TX (Serial Fingerprint Module Transmit)
- Pin 4:** 3V3 (3.3V Power)
- Pin 5:** TOUCHIN (Touch Input)
- Pin 6:** 3V3 (3.3V Power)

Additional labels and connections shown in the diagram include:

- PD3 - TXD1** and **PD2 - RXD1** are connected to the SFM RX and SFM TX pins, respectively, via bidirectional arrows.
- PD1 - INT0 - TOUCH IN** is connected to the TOUCHIN pin.
- The header is labeled **A2541WR-6P** at the bottom right.
- A red box highlights the pins 1 through 6.



ATMEGA 128

U1

VCC

PDI

PDO

SCK

RESETSW

VCC

XTAL1

XTAL2

DBRESETSW

TOUCHIN

SFM TX

SFM RX

R3 10k

R7 1k

R8 1k

PD1 - INT1 - DB RESET SW

PD0 - INT0 - TOUCH

AVCC

GND

AREF

PF0(ADC0)

PF1(ADC1)

PF2(ADC2)

PF3(ADC3)

PF4(ADC4/TCK)

PF5(ADC5/TMS)

PF6(ADC6/TDO)

PF7(ADC7/TDI)

GND

VCC

PA0(AD0)

PA1(AD1)

PA2(AD2)

PA3(AD3)

PA4(AD4)

PA5(AD5)

PA6(AD6)

PA7(AD7)

PG2(ALE)

PC7(A15)

PC6(A14)

PC5(A13)

PC4(A12)

PC3(A11)

PC2(A10)

PC1(A9)

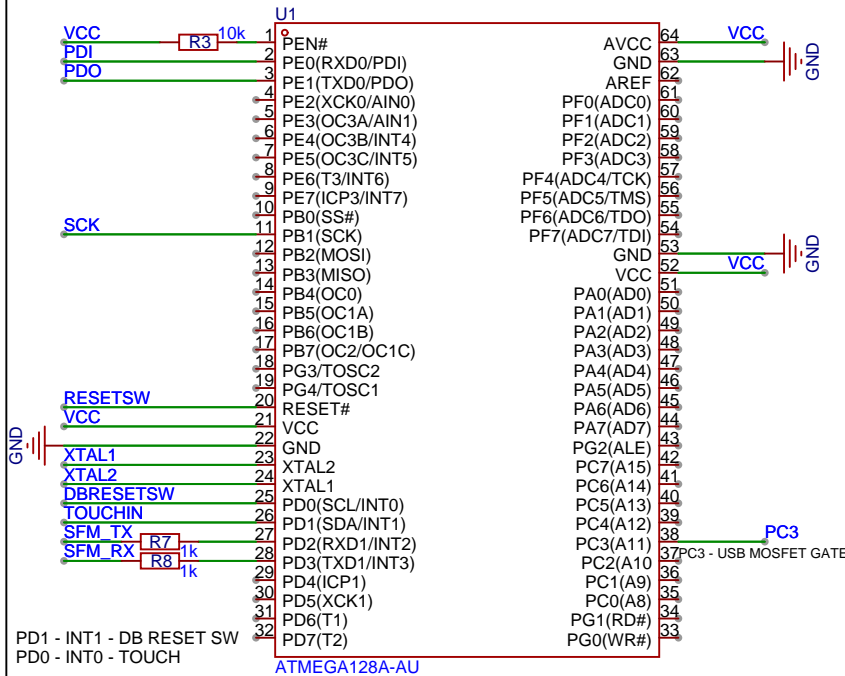
PC0(A8)

PG1(RD#)

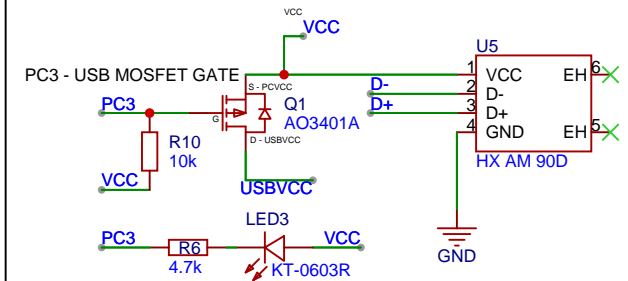
PG0(WR#)


PC3 - USB MOSFET GATE

ATMEGA128A-AU



# USB MOSFET



Schematic	Schematic2			Update Date	2024-12-07
Page	For display			Create Date	2024-11-21
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