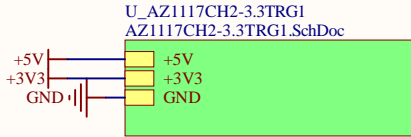
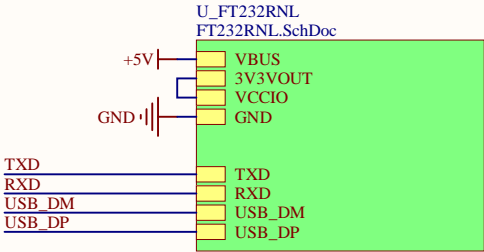
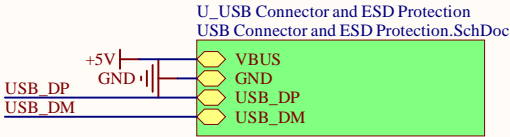
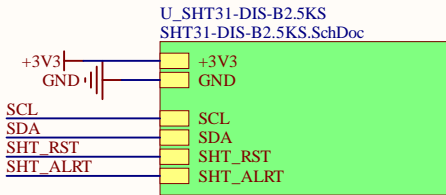
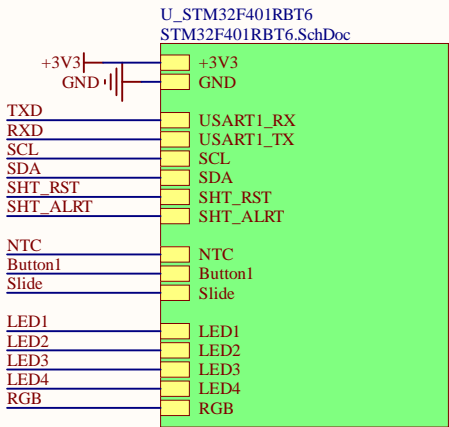
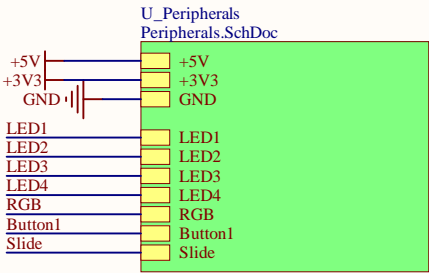


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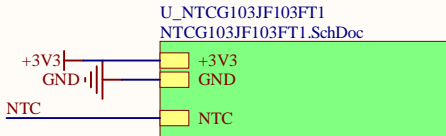
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PCB para dar formações de desenho de PCB e soldadura no Centi.

Title: PCB formação

Project: Smart Systems

Date: 03/02/2025

Rev: 0

Sheet 1 of 8

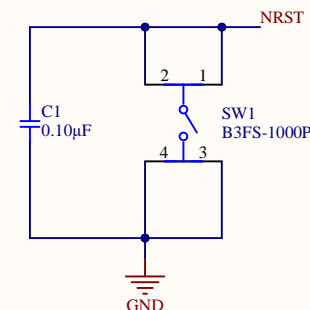
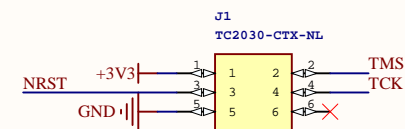
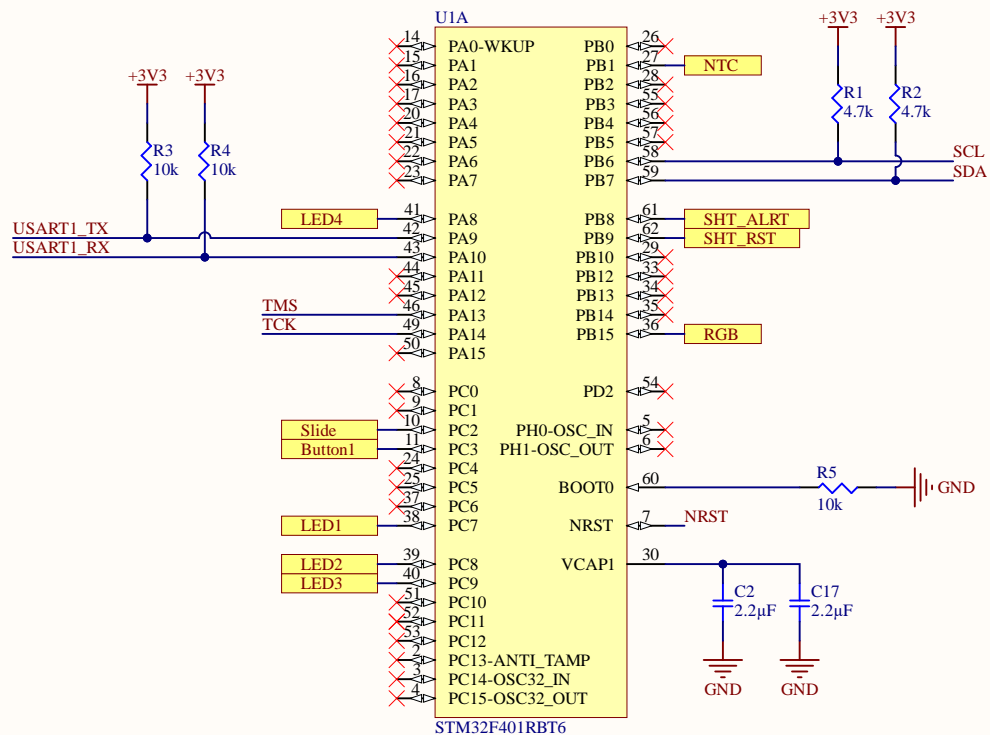
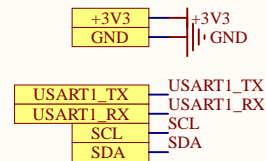
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4760-034, Portugal

Author: FFC



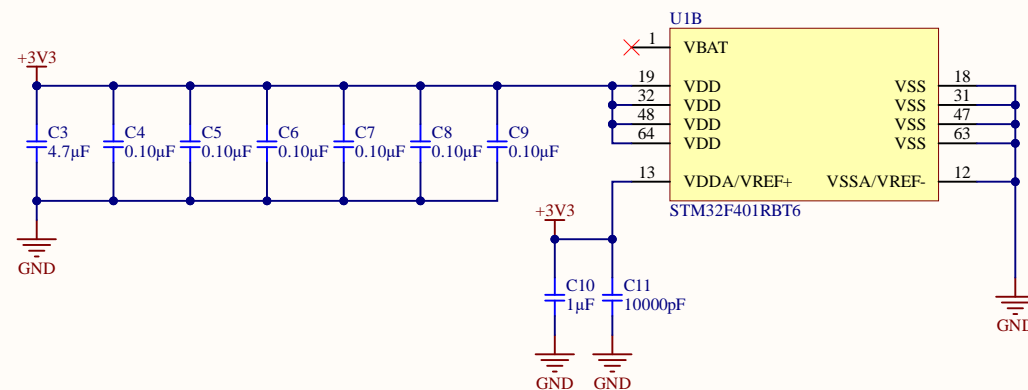
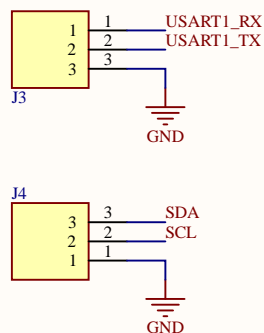
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STM32F401RBT6 microcontroller circuit.

Este circuito engloba o microcontrolador, condensadores para os pinos de alimentação do uC, conectores para os protocolos UART e I2C, e para flashar o uC, assim como um botão de reset.

Datasheet: [STM32F401RBT6](#)

Title: STM32F401RBT6

Project: Smart Systems

Date: 03/02/2025

Rev: 0

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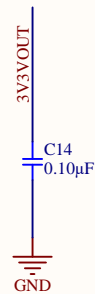
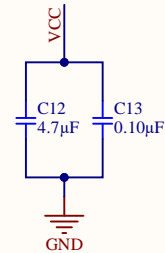
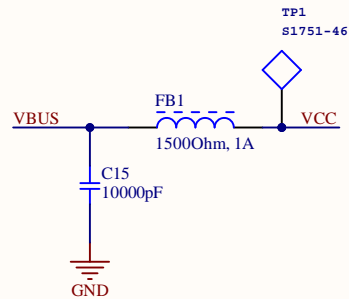
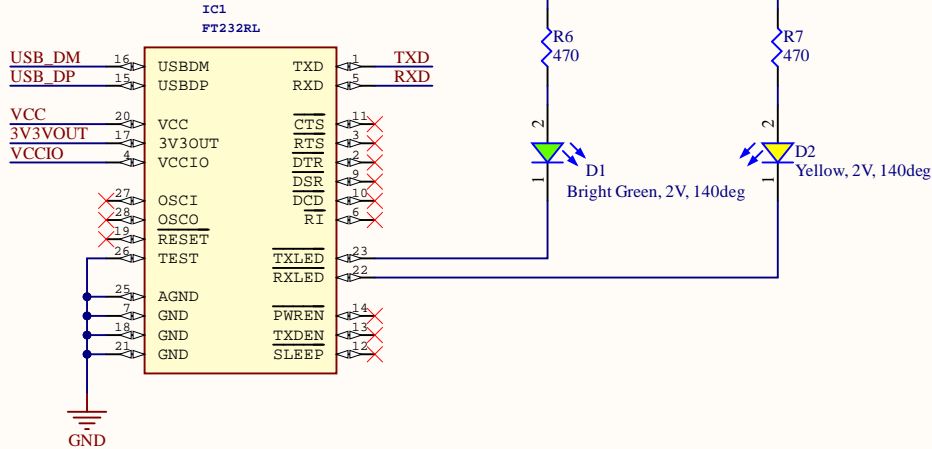
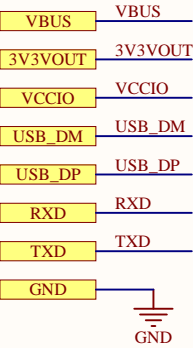
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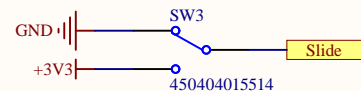
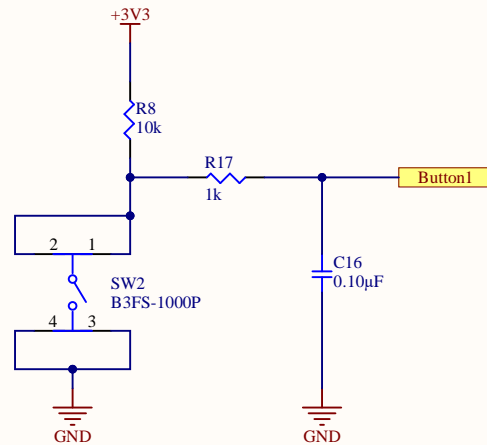
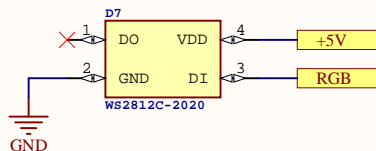
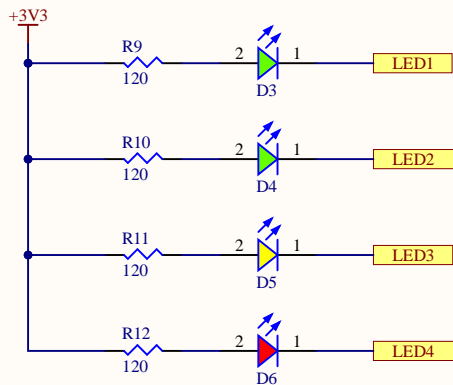
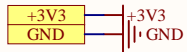
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**Notes:**

Before selecting pins, read the datasheet. The VCCIO pin must be connected to VCC or to 3V3VOUT. [Datasheet](#) in order to select the voltage level of TXD and RXD pins (UART signals).





Periféricos para interação com a placa.  
4 LEDs normais e um LED RGB para indicação.  
1 botão de pressão e um botão slide, para atuação.  
Datasheet: [WS2812C-2020](#)

Title: Board peripherals

Project: Smart Systems

Date: 03/02/2025

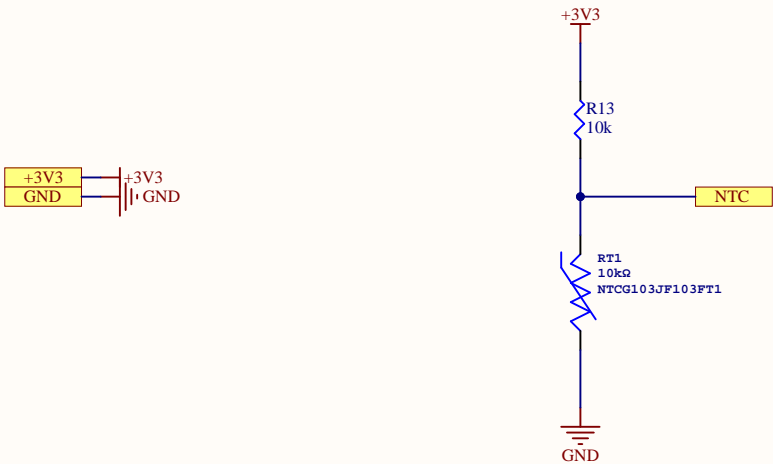
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Circuito com sensor NTC para medição de temperatura pelo ADC do microcontrolador.

Datasheet: [NTCG103JF103FT1](#)

Title: NTCG103JF103FT1

Project: Smart Systems

Date: 03/02/2025

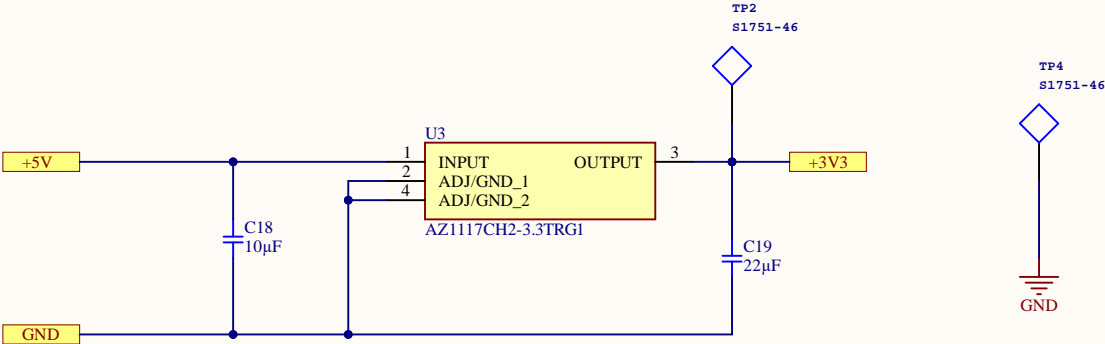
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Author: FFC





Circuito regulador de tensão baseado no integrado AZ1117CH2-3.3TRG1, regula a tensão de +5V que vem do USB para uma tensão de +3,3V necessária para o circuito do microcontrolador e os seus periféricos.

Datasheet: [AZ1117CH2-3.3TRG1](#)

Title: AZ1117CH2-3.3TRG1			CeNTI Rua Fernando Mesquita 2785 Vila Nova de Famalicão 4760-034, Portugal
Project: Smart Systems			
Date: 03/02/2025	Rev: 0	Sheet 6 of 8	Author: FFC



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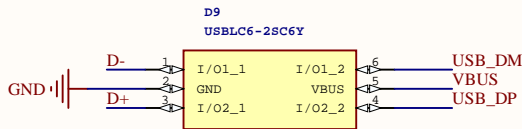
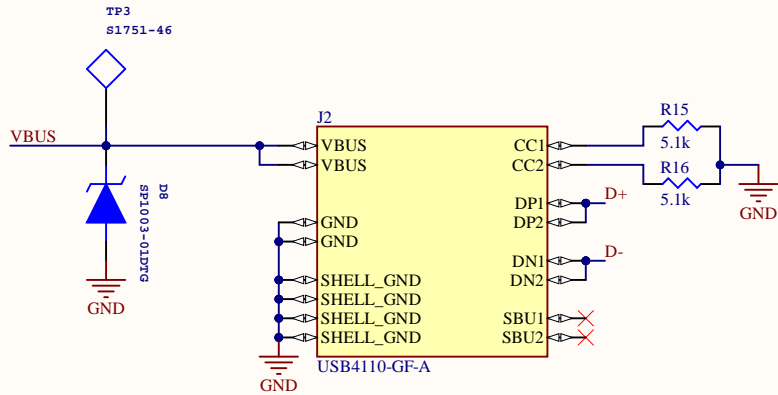
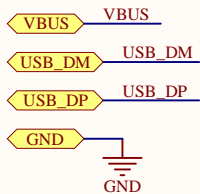
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Circuito do conector USB-C, díodos de proteção.

Datasheet: [USBLC6-2SC6Y](#)

Title: USB Connector and ESD Protection

Project: Smart Systems

Date: 03/02/2025

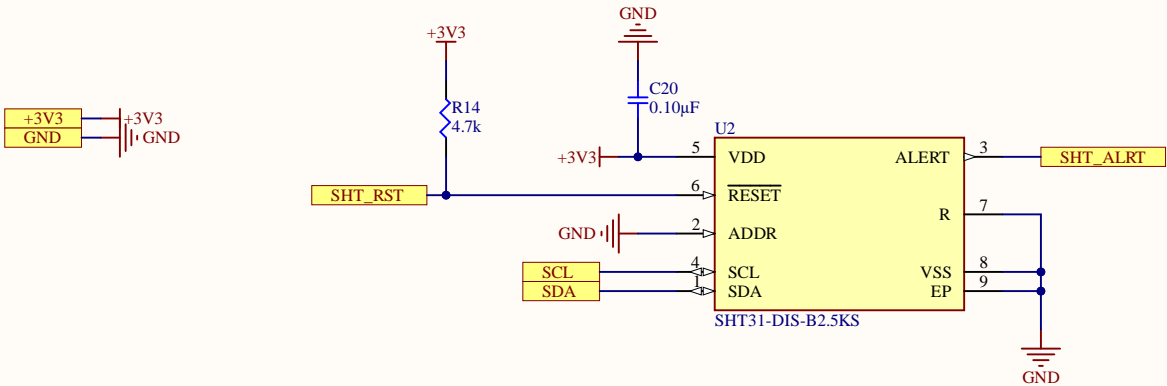
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Author: FFC





Sensor SHT31 para medições de temperatura e humidade, utiliza o protocolo I2C para comunicação com o microcontrolador.

Datasheet: [SHT31-DIS-B2.5KS](#)

Title: SHT31-DIS-B2.5KS

Project: Smart Systems

Date: 03/02/2025

Rev: 0

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