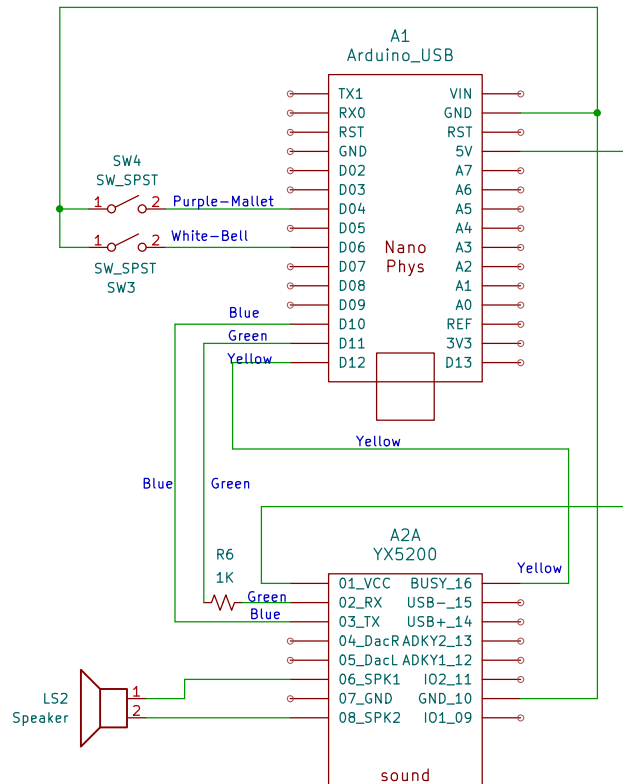


Arduino Nano/Uno and YX5200 5V Works Reliably

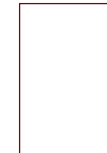


74HCT125N



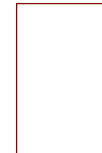
File: 74HCT125N.kicad_sch

3.3V Power



File: 3.3V.kicad_sch

3.3V UART



File: 3.3V_UART.kicad_sch

<https://github.com/Mark-MDO47/RingTheBell>

Sheet: /

File: RingTheBell.kicad_sch

Title: Ring the Bell Prototypes

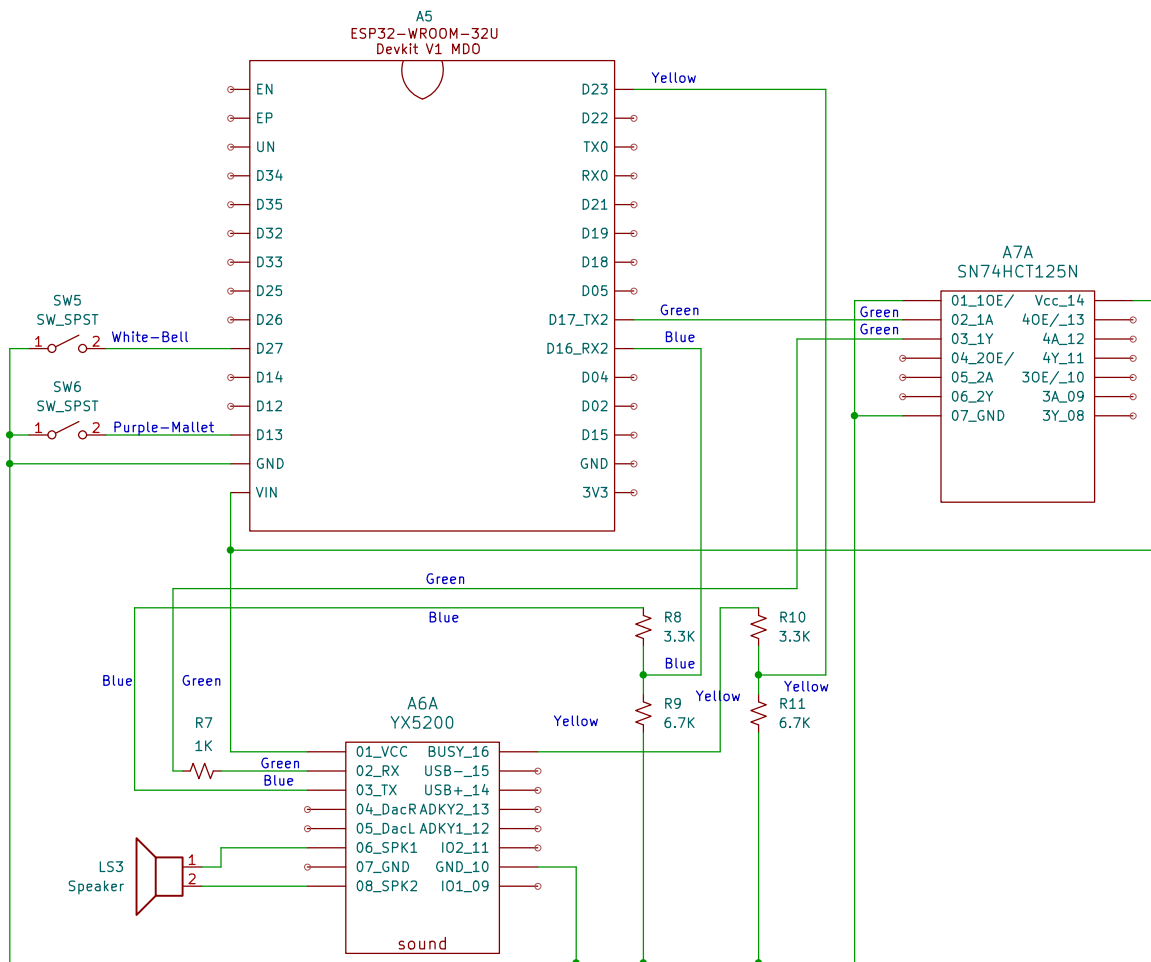
Size: USLetter Date: 2025-06-20

KiCad E.D.A. 9.0.2

Rev: Rev 0.9

Id: 1/4

YX5200 5V Power and 5V UART Works Reliably



<https://github.com/Mark-MDO47/RingTheBell>

Sheet: /74HCT125N/
File: 74HCT125N.kicad_sch

Title: Ring the Bell Prototypes

Size: USLetter Date: 2025-06-20
KiCad E.D.A. 9.0.2

Rev: Rev 0.9
Id: 2/4

YX5200 Spec says it runs at 3.2V~5V, typical 4.2V
Does not work reliably at 3.3V Power
with UART at 3.3V

The schematic diagram illustrates the electrical connections between two modules:

- A8: ESP32-WROOM-32U Devkit V1 MDO**: This module's pins are connected as follows:
 - EN, EP, UN, D34, D35, D32, D33, D25, D26, D27, D14, D12, D13, GND, VIN, D23, D22, TX0, RX0, D21, D19, D18, D05, D17_TX2, D16_RX2, D04, D02, D15, GND, and 3V3.
- A9A: YX5200**: This module's pins are connected as follows:
 - 01_VCC, 02_RX, 03_TX, 04_DacRADKY2_13, 05_DacL ADKY1_12, 06_SPK1, 07_GND, 08_SPK2, BUSY_16, USB-_15, USB+_14, IO2_11, GND_10, and IO1_09.

Key components and their connections include:

- SW7 (SW_SPST)**: White-Bell switch, connected to pin D27 of A8.
- SW8 (SW_SPST)**: Purple-Mallet switch, connected to pin D13 of A8.
- R12 (Resistor)**: Green, 1K resistor, connected to pin D14 of A8.
- LS4 Speaker**: Connected to pins 06_SPK1 and 07_GND of A9A.
- Wires**: Various colored wires (Yellow, Green, Blue) connect the modules and components.

Legend:

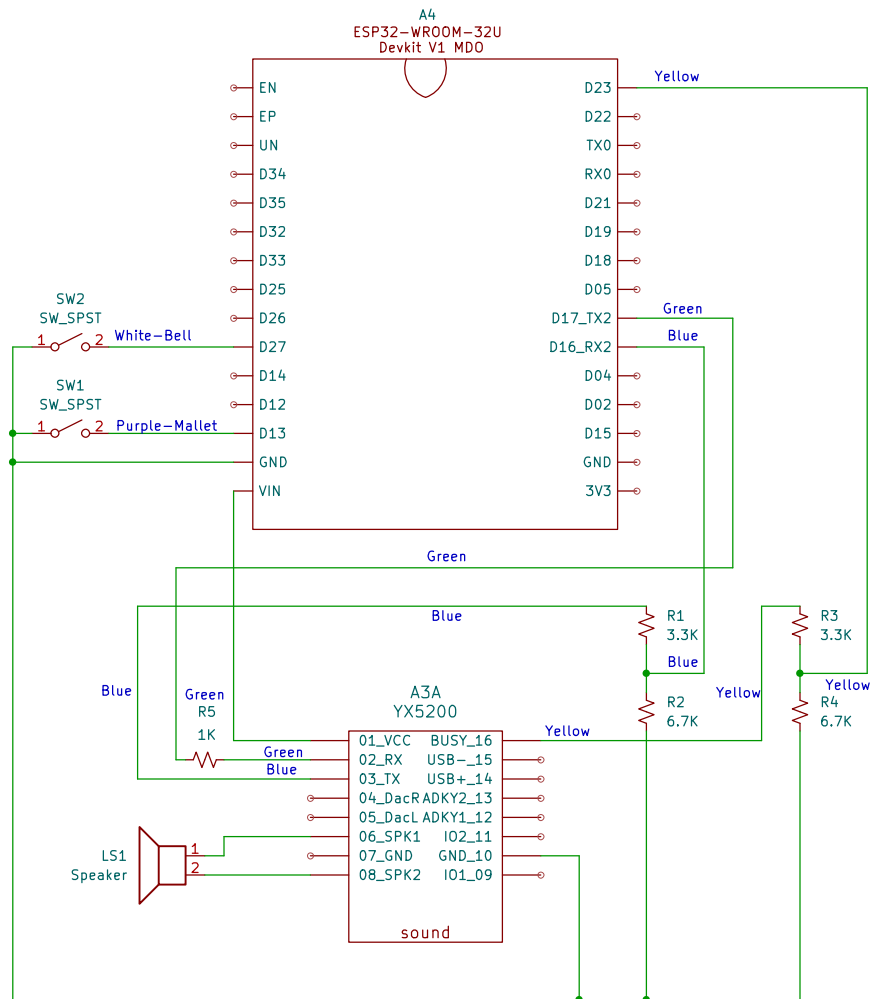
- Yellow: Yellow wire
- Green: Green wire
- Blue: Blue wire

Metadata:

- Source: <https://github.com/Mark-MD047/RingTheBell>
- Sheet: /3.3V Power/
- File: 3.3V.kicad_sch
- Title: Ring the Bell Prototypes
- Size: USLetter | Date: 2025-06-20 | Rev: Rev 0.9
- KiCad E.D.A. 9.0.2 | Id: 3/4

Id: 3/4

YX5200 Spec says it runs at 3.2V~5V, typical 4.2V
Does not work reliably at 5V Power
with UART at 3.3V



<https://github.com/Mark-MDO47/RingTheBell>

Sheet: /3.3V UART/
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Rev: Rev 0.9
Id: 4/4