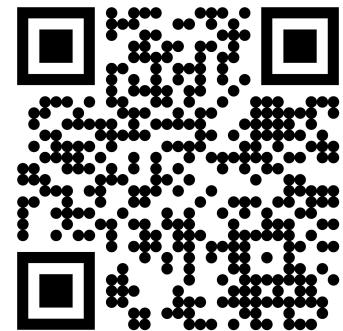


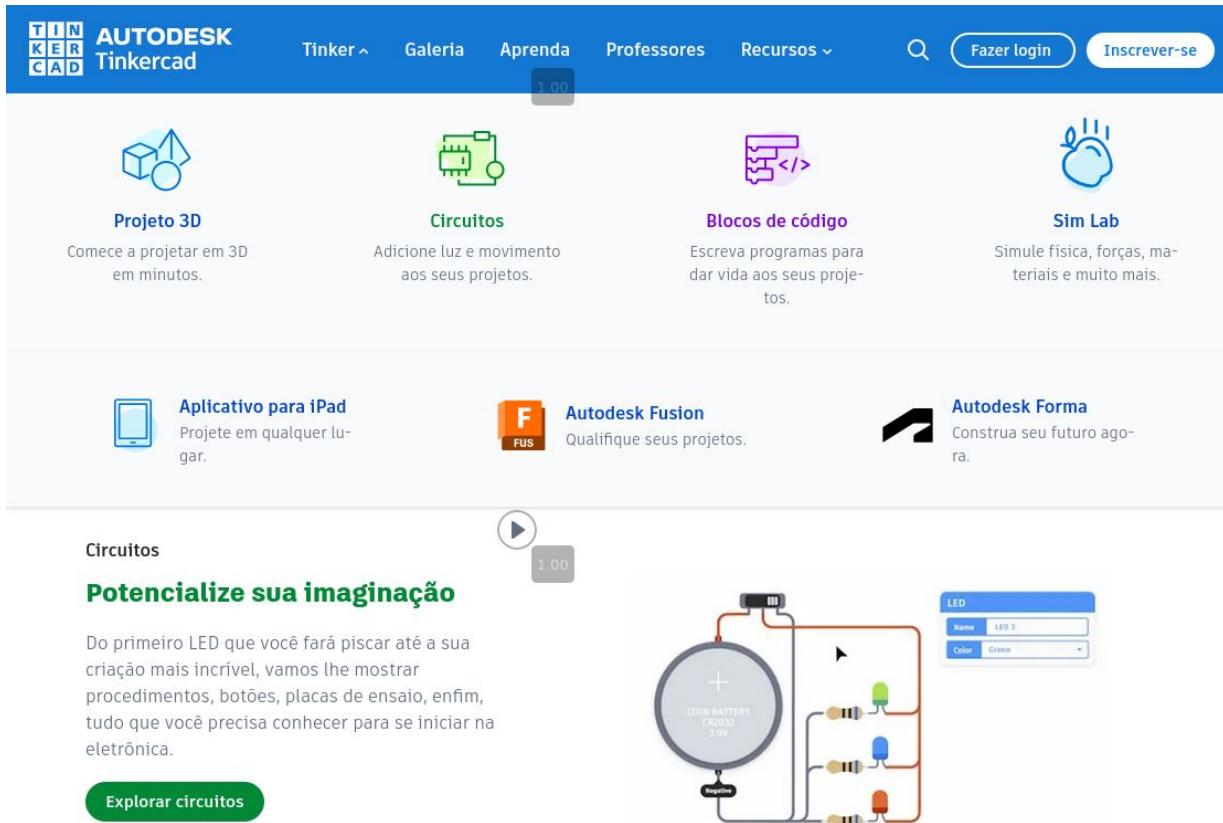
Simulação

TinkerCad e SimulIDE

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<https://www.tinkercad.com/>



The screenshot shows the Tinkercad homepage with a blue header bar. The header includes the Tinkercad logo, navigation links for Tinker, Galeria, Aprenda, Professores, Recursos, a search bar, and buttons for 'Fazer login' and 'Inscrever-se'. Below the header, there are four main project categories: 'Projeto 3D', 'Circuitos', 'Blocos de código', and 'Sim Lab', each with an icon and a brief description.

Projeto 3D
Comece a projetar em 3D em minutos.

Circuitos
Adicione luz e movimento aos seus projetos.

Blocos de código
Escreva programas para dar vida aos seus projetos.

Sim Lab
Simule física, forças, materiais e muito mais.

Below these categories, there are three external links: 'Aplicativo para iPad', 'Autodesk Fusion', and 'Autodesk Forma', each with an icon and a brief description.

Aplicativo para iPad
Projete em qualquer lugar.

Autodesk Fusion
Qualifique seus projetos.

Autodesk Forma
Construa seu futuro agora.

Further down, there is a section titled 'Circuitos' with a play button icon and a sub-section titled 'Potencialize sua imaginação' featuring a circuit diagram and a component editor.

Potencialize sua imaginação

Do primeiro LED que você fará piscar até a sua criação mais incrível, vamos lhe mostrar procedimentos, botões, placas de ensaio, enfim, tudo que você precisa conhecer para se iniciar na eletrônica.

[Explorar circuitos](#)

The circuit diagram shows a simple series circuit with a 3V CR2032 battery, a green LED, and a red resistor. To the right, a component editor window is open for the LED, showing 'Name: LED 3' and 'Color: Green'.

Login

Bem-vindo de volta

Como você usa o Tinkercad?

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Por conta própria

Contas pessoais

Ainda não tem uma conta?

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Tela inicial

TINKER CAD Autodesk Tinkercad

Tinker Galeria Aprenda Professores Recursos

 josewrpereira

[+ Criar](#)

Inicio

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Desafios

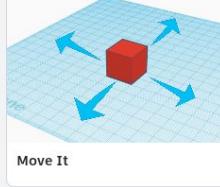
Centro de ajuda

Projeto 3D

 Crie seu primeiro projeto 3D

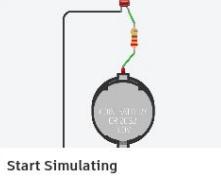
 Place It

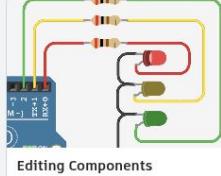
 View It

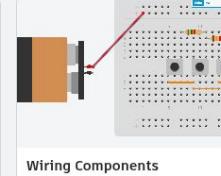
 Move It

Circuitos

 Crie seu primeiro projeto de circuitos

 Start Simulating

 Editing Components

 Wiring Components

4

Círcuito de teste das portas lógicas

TINKER CAD Teste_PortasLógicas

Todas as alterações salvas

Código Iniciar simulação Enviar para

Componentes Todos

Porta

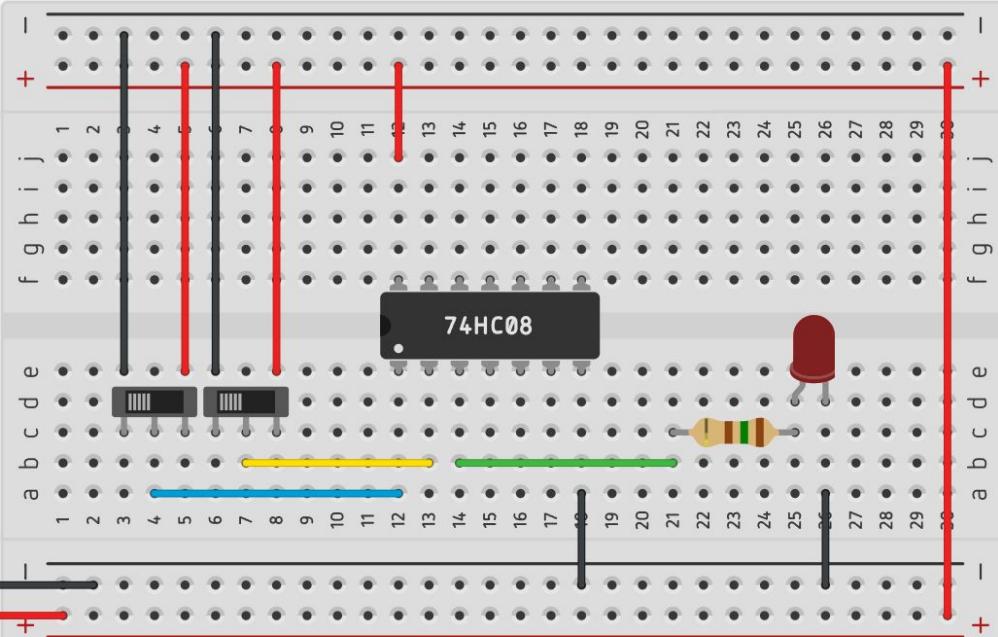
Lógica

74HC08 74HC02 74HC00
Porta quad NAND Porta quad NOR Porta quad AND

74HC32 74HC06 74HC08
Porta quad OR Porta quad XOR Porta NAND de três...

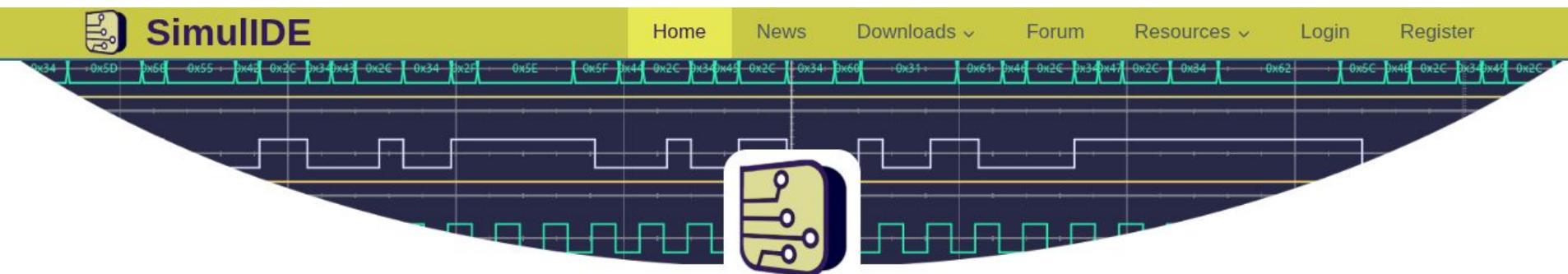
74HC11 74HC27 74HC08
Porta AND de três entrada... Porta NOR de três entrada... Porta NAND de quatro...

74HC21
Porta AND de quatro...



The circuit diagram is designed to test a 74HC08 integrated circuit, which contains four 2-to-4 AND gates. The circuit is built on a breadboard grid. Power is supplied from a 30V source at the top and a 5A source at the bottom. A digital voltmeter (DMM) is connected across the power rails to monitor the voltage. The 74HC08 chip is centered, with its pins labeled 'a' through 'j'. Inputs 'a' and 'b' are connected to the first two columns of the breadboard. Input 'c' is connected to the third column. Input 'd' is connected to the fourth column. Input 'e' is connected to the fifth column. Input 'f' is connected to the sixth column. Input 'g' is connected to the seventh column. Input 'h' is connected to the eighth column. Input 'i' is connected to the ninth column. Input 'j' is connected to the tenth column. The outputs of the four gates are connected to the first four columns of the breadboard. A 10kΩ pull-up resistor is connected between output 'a' and the positive rail. A 10kΩ pull-down resistor is connected between output 'd' and ground.

<https://simulide.com/p/>

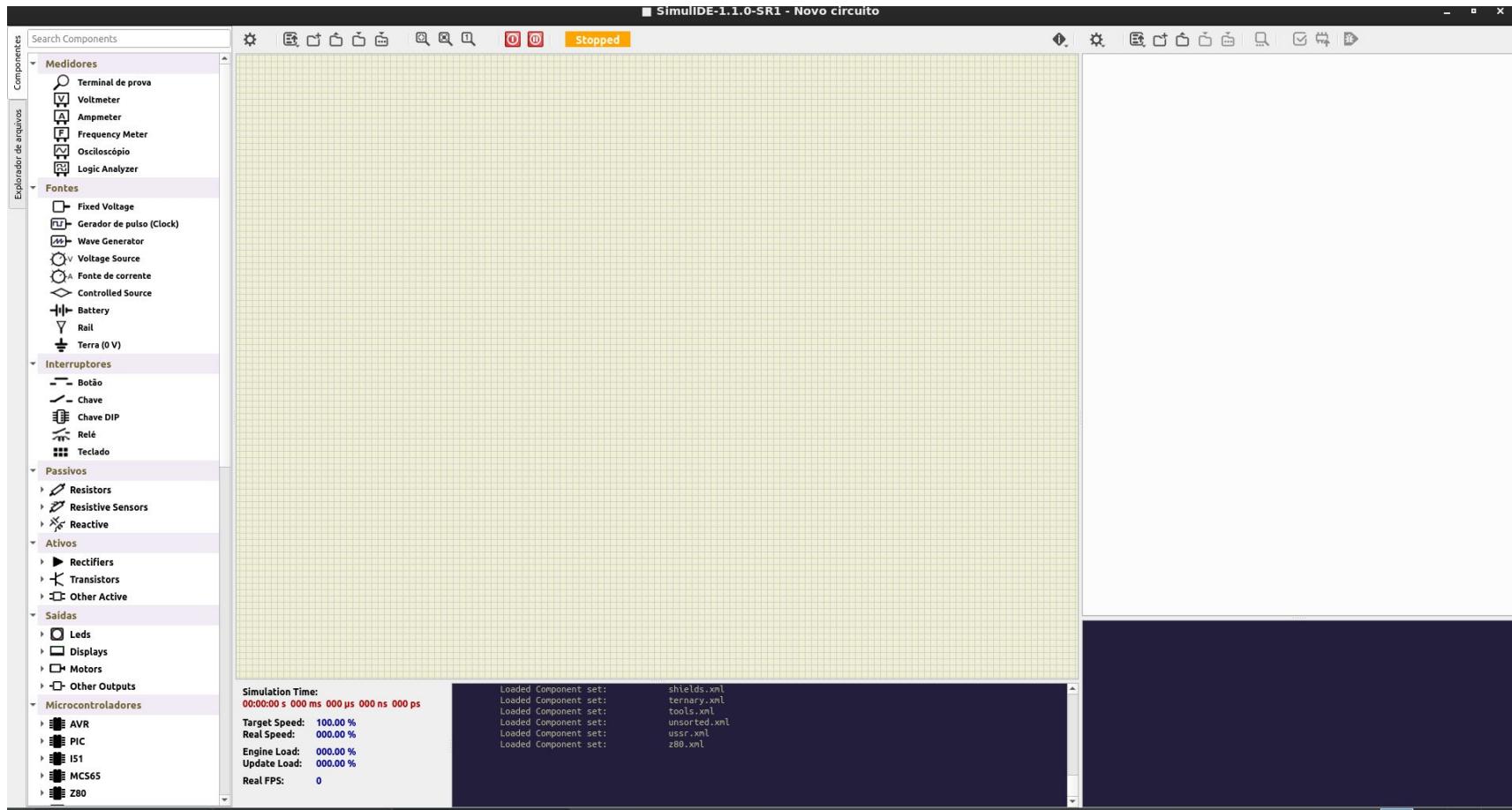


SimulIDE Circuit Simulator

SimulIDE is a simple real time electronic circuit simulator, intended for hobbyist or students to learn and experiment with analog and digital electronic circuits and microcontrollers.
It supports PIC, AVR , Arduino and other MCUs and MPUs.

[Learn More](#)

SimulIDE



The screenshot shows the SimulIDE 1.1.0-SR1 software interface. On the left, a vertical toolbar displays categories of electronic components: Medidores (Terminal de prova, Voltmeter, Ampmeter, Frequency Meter, Osciloscópio, Logic Analyzer), Fontes (Fixed Voltage, Gerador de pulso (Clock), Wave Generator, Voltage Source, Fonte de corrente, Controlled Source, Battery, Rail, Terra (0 V)), Interruptores (Botão, Chave, Chave DIP, Relé, Teclado), Passivos (Resistors, Resistive Sensors, Reactive), Ativos (Rectifiers, Transistors, Other Active), Saídas (Leds, Displays, Motors, Other Outputs), Microcontroladores (AVR, PIC, I51, MCS65, Z80). The main workspace is a grid-based area for circuit design. The status bar at the bottom provides simulation information: Simulation Time: 00:00:00 s 000 ms 000 µs 000 ns 000 ps; Target Speed: 100.00 %; Real Speed: 000.00 %; Engine Load: 000.00 %; Update Load: 000.00 %; Real FPS: 0. The bottom right corner contains a log of loaded component sets: shields.xml, ternary.xml, tools.xml, unsorted.xml, ussr.xml, z80.xml.

Search Components

Components

Explorador de arquivos

■ SimulIDE-1.1.0-SR1 - Novo circuito

Stopped

Simulation Time: 00:00:00 s 000 ms 000 µs 000 ns 000 ps

Target Speed: 100.00 %

Real Speed: 000.00 %

Engine Load: 000.00 %

Update Load: 000.00 %

Real FPS: 0

Loaded Component set: shields.xml

Loaded Component set: ternary.xml

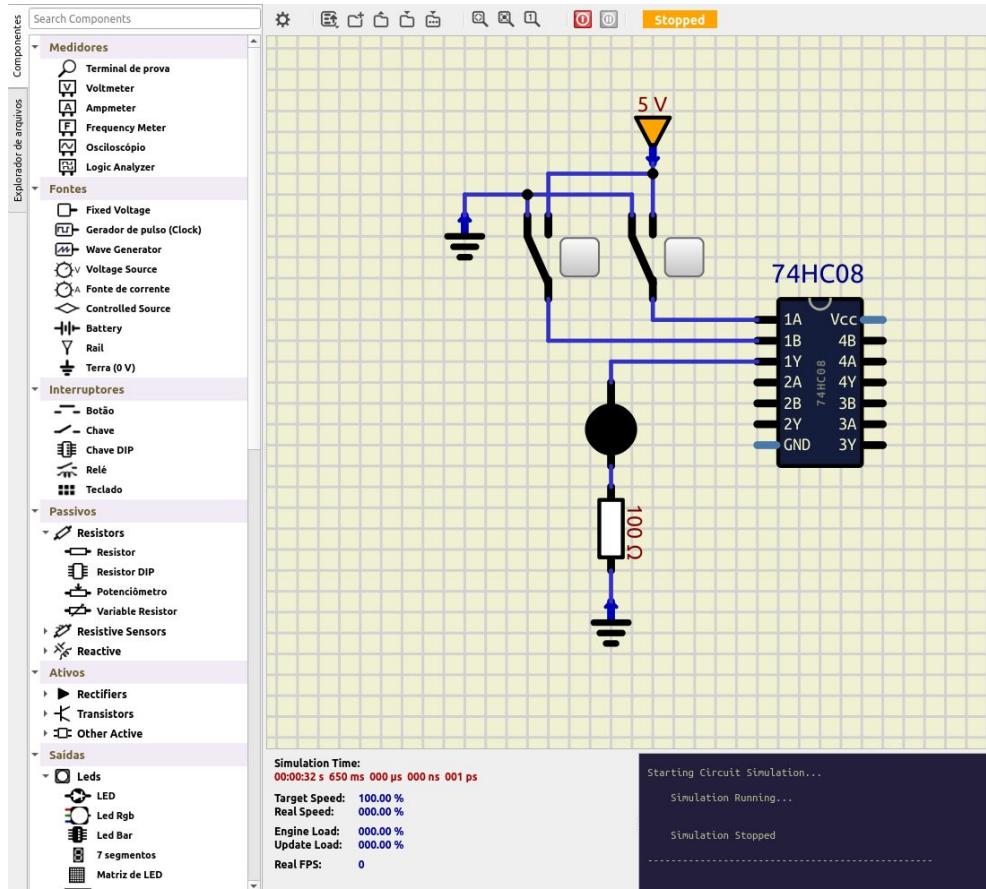
Loaded Component set: tools.xml

Loaded Component set: unsorted.xml

Loaded Component set: ussr.xml

Loaded Component set: z80.xml

Círculo de teste da porta lógica



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