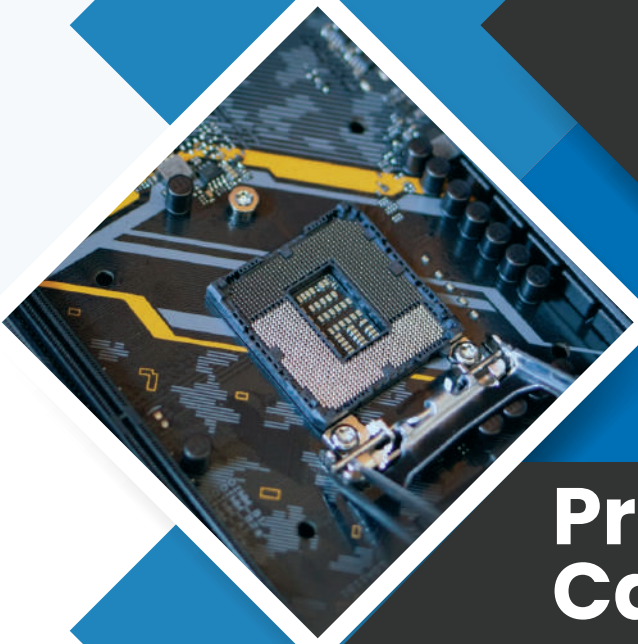
SB Components
We Make Things Intelligent



Product Catalog

• Raspberry Pi • Pico • Breakout • Micro:Bit

WWW.SB-COMPONENTS.CO.UK

About Us

Founded in 2012, SB Components is a UK based Research & Development Organization.

We compete with perseverance and hard work successfully with the top players in the electronics industry. We strongly adhere to our watchwords: **Precision, Performance, Quality** and **Simplicity.**

SB Component has provided a broad range of services, such as:

- **Idea based Applications**
- **Robots**
- **Internet of Thing**
- **Automation**
- **Raspberry Pi-based new product development**
- **Image Processing**
- **Artificial Intelligence**
- **Hardware Design**
- **Firmware Development**

In addition to the above, SB Components has delivered various industrial grade projects in many countries, such as UK, Kuwait, Antigua and India to name a few.

We have a strong and dedicated Research & Development department with highly qualified and experienced team of engineers and developers capable of producing volumes of industrial hardware, AI-based robots/Image classification, and open-source hardware.

Our Services

AI and Robotics Solution

Hardware and PCB Designing

IoT Solutions

Linux based Applications

Research and Development

Embedded System

Machine Learning

GSM Technologies

Education & Training

IoT Applications

Enclosure Designing

Laser Engraving and other Customizations

Embedded Systems

Technical Support & Assistance

Why choose SB Components

Becoming our Authorized Distributor entails an array of exclusive benefits for you.

- Priority business relationship
- Business and sales support
- Dedicated Business Manager
- Dedicated Technical Support
- Multi-Currency Payment Options for different countries
- Exclusive Pre-launch Deals
- Additional Discounts on Volume
- Get free samples & win freebies

Product Categories

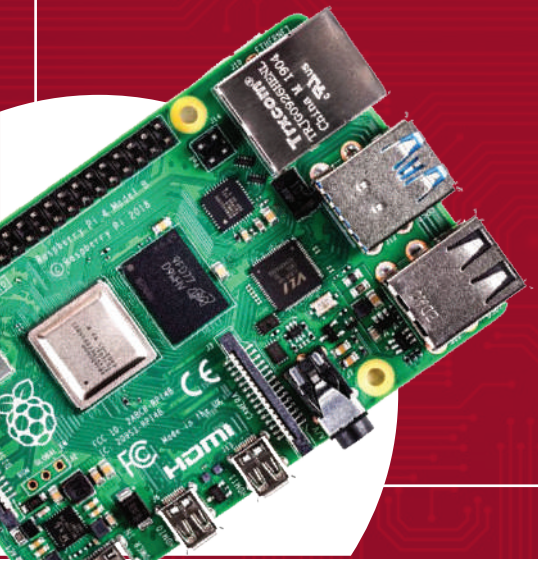
- Raspberry Pi based Products
- Raspberry Pi Pico and RP2040 based Products
- Raspberry Pi Enclosures
- Espressif Systems based Products
- Breakouts

Raspberry Pi

Raspberry Pi, the **low-cost, credit card-sized single-board series,** integrates CPU, GPU, RAM ports and other components on board with all-in-one packages in one built-in circuit.

It was developed in 2012 by the Raspberry Pi Foundation, a non-profit organisation in the UK, to place computing technology and digital production in the hands of the world's people.

Raspberry Pi hardware can perform the tasks of a desktop in an inexpensive and compact way, like playing HD videos, web browsing, games, etc.



PI-TALK

First ever modular and IoT enabled smartphone developed on the Raspberry Pi

SKU08100

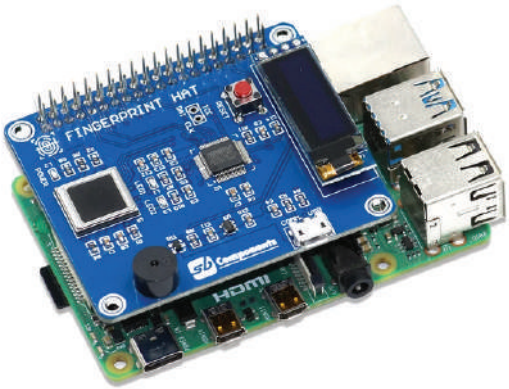
Compatible with Raspberry Pi 4, 3, 2 and Zero, PiTalk comes packed with a 3G module for blazing fast voice and data communication.

Develop your own Apps for PiTalk in Python and control your applications by just sending SMS or making calls, create WiFi hotspot for accessing 3G data, take pictures and so on.

PiFinger

Fingerprint HAT for Raspberry Pi

SKU21253



PiFinger for Raspberry Pi is the latest product having an advanced range of technology from SB Components.

PiFinger, the first-ever Fingerprint HAT for Raspberry Pi comprising of onboard Nuvoton MCU with an on-chip cryp-to-accelerator, Cortex-M23 TrustZone, and XOM facilities.

PiMecha

A Miniature Humanoid Robot which moves around with precise Smartbus Servo Motors.

SKU07950 **Assembled**

SKU07981 **Unassembled**

PiMecha is versatile, upgradable and customizable with various parts, sensors and cameras. User can attach their own components, ranging from a simple ultrasonic sensor, camera or LCD screen such as frightening lasers to scare off unwanted intruders.

LapPi

100% DIY Laptop

SKU08001

LapPi gives you full functionality of a desktop computer in a versatile, hand-held device having a complete set with all the ports, processing powers and programs you need to operate at full capacity.
It can be easily assembled, built, and run by anyone. Each part is completely configurable and can be used with other projects as well.
Available in Clear, Black, Yellow, Blue, Green & Red Colors - Both assembled and unassembled.

PiArm

Raspberry Pi based DIY robotic arm.

SKU10400 (5" Screen)

SKU10394 (7" Screen)

PiArm is a Raspberry Pi based DIY robotic arm equipped with 6-axis digital servo motors and 360°-of-rotation-freedom designed and developed for kids, makers, techies and everyone else

The PiArm is a fast, powerful and precise-full-metal-light-weight robotic arm compatible with all Raspberry Pi variants. It is an open source software and hardware powered by a shield that support both USB and GPIO communication.

PiStack

Stacks up to 3 HAT's with Raspberry Pi

SKU14095

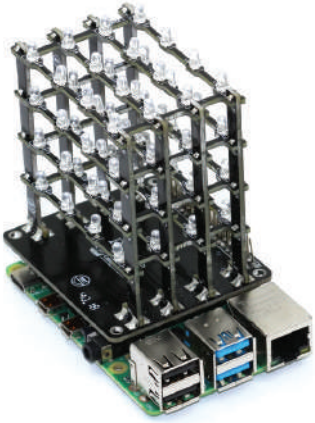
PiStack is an I/O expansion kit designed for Raspberry Pi, which provides 3 sets of 2x20 pin headers to connect up to 3 HATs together .

A handy way to "stack" different multi HATs together, and use them as a specific combination/ project.

PiCube

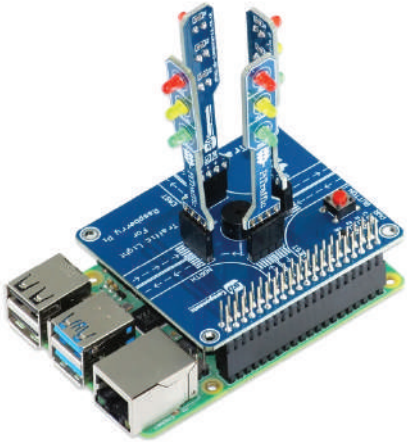
4x4x4 LED Cube for Raspberry Pi

SKU07714



PiCube is a 4x4x4 LED cube HAT for Raspberry Pi with 64 monochromatic(Red, Blue, Green) LEDs with 5V DC operating voltage.

PiCube is designed to perform incandescent operations with low energy consumption, robust outlook, and easy installation that make people/ kids/ users learn the effects of LED lights with a different pattern of colors via the combination of software and hardware i.e. Raspberry Pi.



PiTraffic

Raspberry Pi Traffic Light HAT

SKU06977

PiTraffic operates on the 5V input with the programmable buzzer and buttons which are connected directly to the GPIO Port. It is a set of 4 traffic lights with the colorful LED (Red, Green and Yellow).

It is a low-cost Raspberry Pi HAT to make the users more connected with the real world traffic light system.

Zero Relay

2 Channel 5V relay board for Raspberry Pi

SKU14088

Zero Relay is a 2 channel relay shield with 7A 250 Volts AC output and 10A 30Volts DC output ratings that provides a solution for controlling high current/voltage devices.

It is designed for triggering at high voltage levels to make your home appliances intelligent.

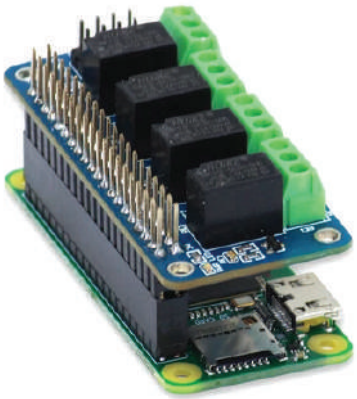
Relay 4 Zero

Make Your device smarter with Relay 4 Zero

SKU14071

Relay 4 Zero is a 4 channel relay shield with 120 V/ 2A AC output and 24 V/ 2A DC output ratings. It provides a solution for controlling low and medium current/ voltage devices and makes your projects intelligent.

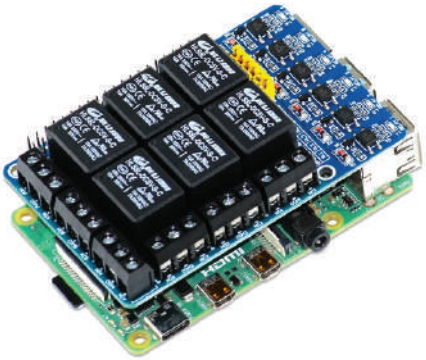
The standardized shield form factor enables a smooth connection with RPi and compatibles.



PiRelay 6

Controls up to 6 devices

SKU21802



PiRelay 6 is a relay shield that can control up to 6 appliances/ devices with photo-coupling isolation on a load of 250V AC/ 7A, 30V DC/ 10A, and a trigger voltage of 3.3V.

It helps the user to enhance the intelligence of the devices. It comprises an “Optocoupler” that allows the circuit to transmit an electrical signal between two isolated circuits through light energy.

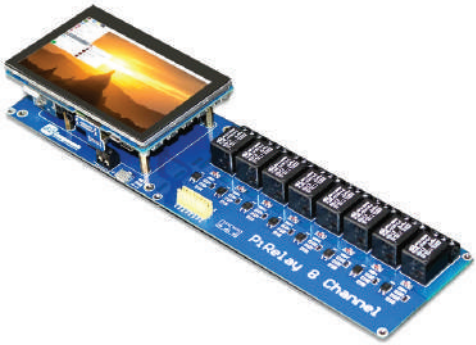
Pirelay 8

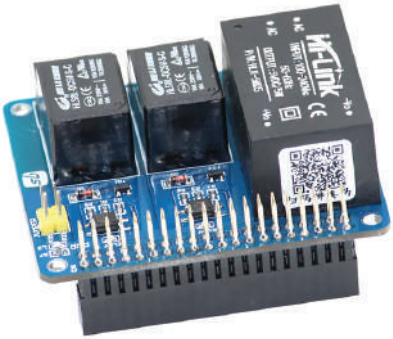
Link Raspberry Pi with up to 8 devices

SKU21857

The PiRelay 8 is a relay expansion board that can control up to 8 appliances/ devices with photo-coupling isolation with load up to 250V AC/ 7A, 30V DC/ 10A, and a trigger voltage of 3.3V.

We added a safety component called the Optocoupler EL357NC in the 8 Channel that functions as a photo coupling isolator in the circuits to ensure safe communication.





Home Automation HAT

Controls up to two devices to make your home smart

SKU21932

Home Automation HAT can control up to 2 appliances/devices on a load of 250V AC/ 7A, 30V DC/ 10A, Photo-Coupling Isolation Optocoupler EL357NC, allowing users to safely control high voltages or current devices.

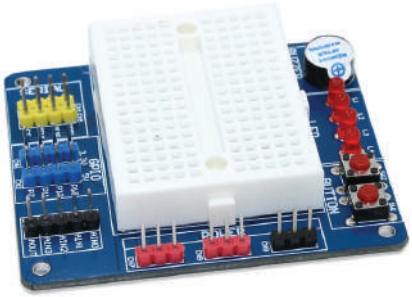
BreadPi

Multipurpose HAT for Raspberry Pi

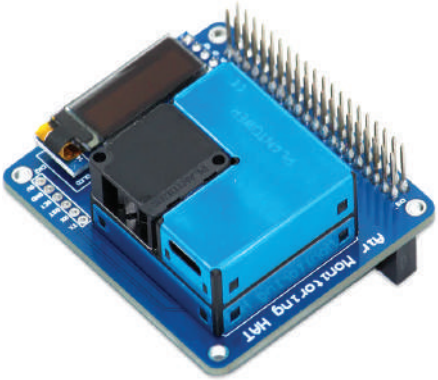
SKU11605

BreadPi is a multi-purpose HAT that consists of a mini breadboard on top, ADC, a Programmable Buzzer, Programmable LEDs, push buttons, and 5V tolerant inputs at the Operating Voltage of 3.3V DC at a single place.

It comes with advanced features like controllable LEDs, inputs (Analog & digital), a mini breadboard that helps the user to prototype their projects in an efficient way.



Air Monitoring HAT



Monitor Air Quality with Raspberry Pi

SKU20768

Air Monitoring HAT consists of a powerful and hi-tech PMSA003 sensor that provides the information of suspended particulate matter (PM1.0, PM2.5, PM10) in the air per unit volume via digital output with an operating voltage of 3.3V. It is an open-source portable sensor that has the ability to provide the level of quantity of the suspended particulates with their mass.

UPS HAT

Uninterruptible Power Supply (UPS) HAT for Raspberry Pi

SKU24438

UPS HAT allows for the safe and orderly shutdown of a Raspberry Pi or any other attached hardware. A UPS, similar to the UPS backups used in our homes and businesses, maybe built to save the Pi during power outages or unintentional shutdowns.

This UPS HAT can offer enough time to store the code on the RPi and can also be used as a separate power supply unit for backup.

GPS HAT

Setup Gloal Positioning System for Raspberry Pi

SKU24056

The extremely compact and powerful GNSS module GPS HAT for Pi is a concurrent receiver module that integrates GPS with the BeiDou system. It's pin-to-pin compatible with Quectel's GNSS module L76 and can receive both GPS and BeiDou open service L1 signals at the same time. GPS HAT for Pi can acquire and track any mix of GPS and BeiDou signals thanks to its 33 tracking channels, 99 acquisition channels, and 210 PRN channels.

RFID HAT

Helps to Read information of user stored in RFID key fob & tags

SKU20003

RFID HAT for Raspberry Pi is an UART interface running at the frequency of 125KHz with a compact design that has a programmable 0.91" OLED Display that compatibles with all the variants of Raspberry Pi.

It helps the user to read the information of ID stored on the RFID key fob and tags. Every RFID tag/key fob comes with a unique identity that cannot get copied.

1.28” Round LCD HAT

1.28-inch display expansion board module

SKU21451

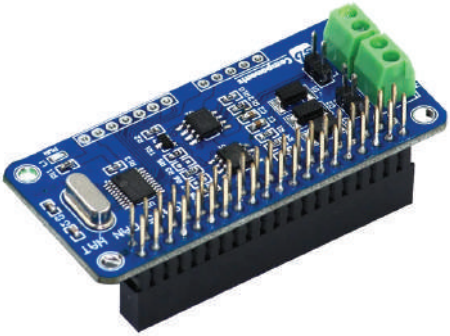
Round LCD HAT is a 1.28-inch display expansion board module with 240×240 resolution, 65K RGB colors, clear and colorful displaying effect designed for Raspberry Pi to expand its engagement via SPI communication by providing standard 40 pins GPIO interface.

It is designed with a 5-input Joystick that will be internally connected to the Round LCD HAT via a stackable GPIO connector header.

RS485 CAN HAT

Communicate in long-range

SKU21444



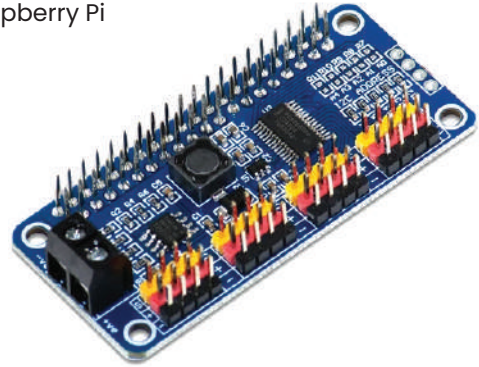
It is a multi node communication module, to communicate with devices in a long-range, designed dedicatedly for Raspberry Pi with an operating voltage of 3.3 V, CAN controller MCP2515 via SPI interface, onboard transceiver SN65HVD230 that is controlled via UART.

It performs half-duplex communication and it has an onboard transceiver SP3485.

16 Channel Servo Driver HAT

12-bit Servo Driver Servo Driver HAT for Raspberry Pi

SKU08957



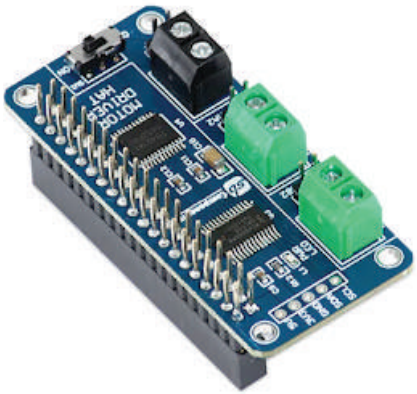
With the 16-Channel 12-Bit PWM/Servo Driver, you can power 16 free-running Servo motors with only two pins. 62 breakouts can be fastened together to power up to 992 PWM outputs. It's a PWM driver with an implied clock that's powered by I2C.

One can control up to 16 servo's simultaneously

Motor Driver HAT

Build DIY mobile robots effortlessly

SKU21789



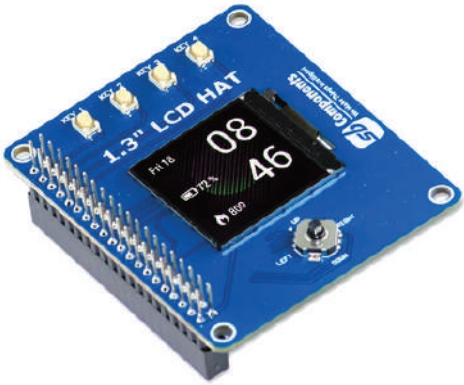
Motor Driver HAT for Raspberry Pi is a module designed to control 2 DC motors simultaneously with I2C communication.

It has a powerful onboard chip PCA9685 which provides 12-bit hardware PWM to adjust the motor speed. The logic voltage is 3.3 V with the motor driver TB6612FNG.

1.3” LCD HAT

Go Beyond the limits of Raspberry Pi
with 1.3" LCD HATi

SKU21864



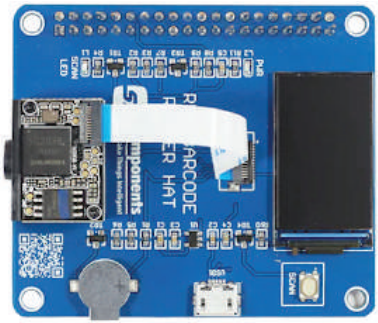
This HAT is a 1.3-inch diagonal display HAT with 240 x 240 resolution, 65K RGB colors, clear and colorful displaying effect and 4 Push buttons, designed for the Raspberry Pi to expand its engagement via SPI communication by providing a standard 40 pin GPIO interface.

It also features a 5-input joystick that is internally connected through a stackable GPIO connector header.

Barcode HAT

robust and compact barcode scanner

SKU22595



Barcode HAT for Raspberry Pi is a robust and compact barcode scanner board that consists of a DE2120 scanner module, buzzer, 1.14” LCD screen, micro-USB port. It is designed to scan 20 different barcode symbologies in the segment of both 1D and 2D symbology like barcodes and QR codes.

The design of the barcode HAT makes it simple for the users to explore all the DE2120’s features without having to deal with the complicated wires.

UHF HAT For Raspberry Pi

An “Ultra High Frequency” RFID reader

SKU24469

UHF HAT for Raspberry Pi is an advanced and compact "Ultra High Frequency" RFID reader that consists of powerful ThingMagic® M6e Nano UHF RFID Reader technology designed for a broad range of applications in the defense, healthcare systems, banks, offices, etc.

Zero barcode HAT

Barcode on RPi Zero Form factor

SKU24889

The Zero Barcode HAT has an on board DE2120 scanner module with a 1.14” LCD screen of 240 x 240 pixels resolution. The device has an on-board scanning button which notifies the scan through a buzzer.

Its micro-USB port give you an opportunity to access two-way communication, i.e. via GPIO pins and micro USB data transfer.

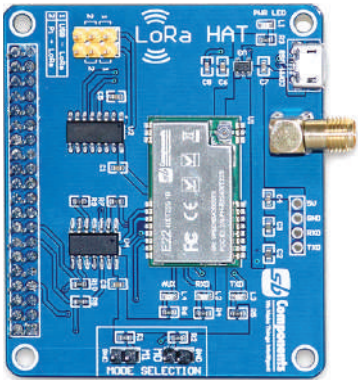
LoRa™ HAT

Highly economical smart data transmission system for range up to 5 KMs

SKU22564 **433MHz**

SKU22571 **868MHz**

SKU22588 **915MHz**

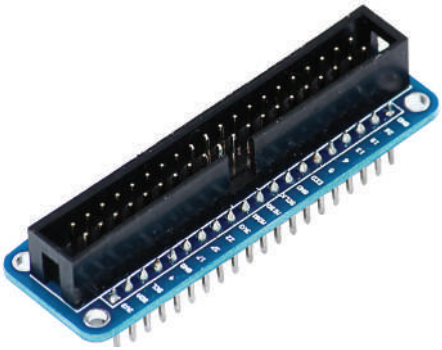


LoRa™ HAT, a low-power consumption data transmission module, comes with an onboard CH340 USB TO UART converter, Voltage Level Translator(74HC125V), E22-900T22S and E22-400T22S SMA antenna connector, IPEX antenna connector, LoRa™ Spread Spectrum Modulation technology with auto multi-level repeating.

RPi Breadboard Breakout

Designed to connect across the middle slot of a breadboard.

SKU14927

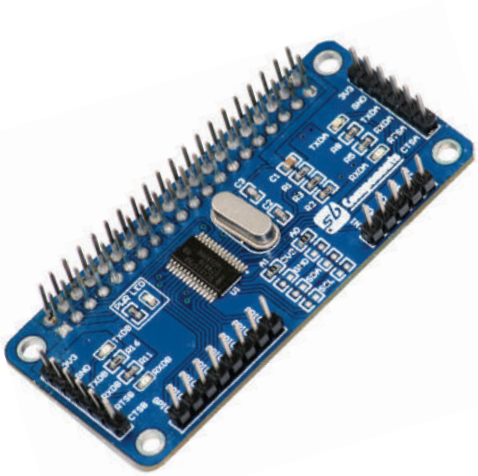


Easy way to connect breadboards from Raspberry Pi by using Raspberry Pi Breadboard Breakout. It allows you to connect or plug a Raspberry Pi into a standard 2.54 mm pitch Breadboard.

Serial Expansion HAT

Expand the functionality and capabilities of the Raspberry Pi

SKU14873

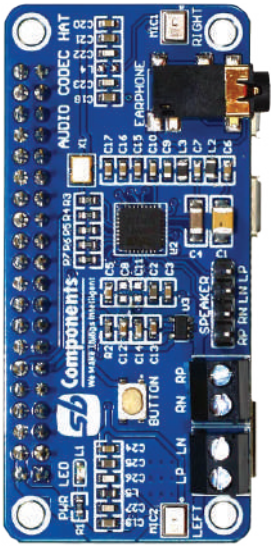


This Expansion HAT for Raspberry Pi gives you a I2C interface & 2-Channel UART with 8 programmable GPIO Pins. To do more things with this Raspberry Pi Serial Expansion HAT we added more slots with which you can attach more accessories and Add-ons.

Audio Codec HAT

Low power, high quality stereo CODEC designed for portable digital audio applications

SKU24087



Audio Codec HAT is designed for portable digital audio applications which is based on WM8960 IC that have the advantages like Low leakage, excellent PSRR and pop/ click suppression mechanisms which allow direct battery connection to the speaker supply.

Flexible speaker boost settings allow speaker output power to be maximized while minimizing other analogue supply currents.

1.54" ePaper HAT

E-Ink Display for Raspberry Pi

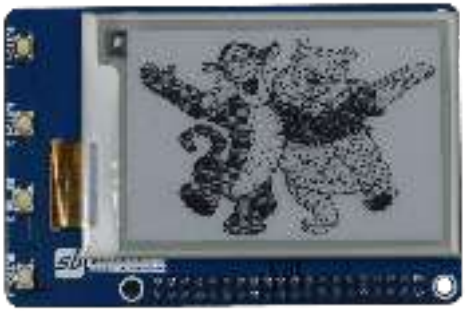
SKU24209

1.54-inch e-paper display is an Active Matrix Electrophoretic Display (AMEPD) with 200x200 resolution.
These e-paper display modules don't require any power after they've been updated, and may even be turned off completely, with the content remaining on the screen indefinitely; ideal for solar or battery-powered devices.

2.7" ePaper HAT

E-Ink Display for Raspberry Pi

SKU24193



2.7-inch e-paper display is an Active Matrix Electrophoretic Display (AMEPD) with 264x176 resolution.
These e-paper display modules don't require any power after they've been updated, and may even be turned off completely, with the content remaining on the screen indefinitely.
comes in two variants with the ability to display black-and-white or black-white-red graphics.

Power Monitoring HAT

Monitor current, voltage & power in each channel

SKU20805

Power Monitor HAT is the 3 Channel Current/ Voltage/ Power Monitor HAT For Raspberry Pi. It uses the I2C or SMBus interface for lightweight communication.

It makes the process easy to monitor current, voltage, or power in each channel and also monitor the voltage between both sides of the sampling resistor.

Motorshield

Helps you create your own Raspberry Pi based Robot.

SKU08001

The Motorshield is designed to help you create your own Raspberry Pi based Robot. This board can control the DC motor as well as the stepper motor. You can connect your IR and Ultrasonic sensors to tell your robot about its environment. You can easily make your Line Following, Object following, Wall following, Maze-Solver Robots.

Pi 400 GPIO Adapter

Connect any type of HAT/ Shield

SKU21239

Raspberry Pi 400 GPIO Adapter is a new I/O expansion kit technological device built with 2 x 20 pins headers designed for Raspberry Pi 400. We have developed this Raspberry Pi GPIO header extension to provide a way to connect any type of HAT with Raspberry Pi 400.

Pi 400 GPIO Expansion

A quick way to access all GPIO pins of RPi 400

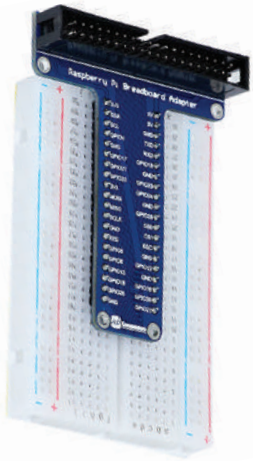
SKU21307

I/O Expansion board designed for Raspberry Pi 400 to expand its utilization via the two dedicated GPIO ports for Raspberry Pi HAT.It works as a GPIO extender by providing two sets of 2 x 20 pin headers for the connection with HATs or Breadboards.

RPi Breadboard Adapter

Big in size, fancy, T-shaped adaptor makes it a lot easier to examine the labels clearly

SKU14576



This 40-GPIO pinned, quad-USB ported Bread-board Adaptor is made to enhance the quality. The users can operate a lot of our great Model B accessories by plugging in with the downgrade cable. The Raspberry Pi Breadboard Adaptor support all variants of Raspberry Pi Model Zero, A+, B+, Pi 2, Pi 3 & Pi 4.

USB RTC

Maintain accurate time keeeping

SKU21185

USB RTC is an open source real time clock device that comprises MCP2221, a USB-to-UART/I2C serial converter, which enables USB connectivity, in the process-es that include a USB, UART(Serial), GPIO, and I2C interfaces.

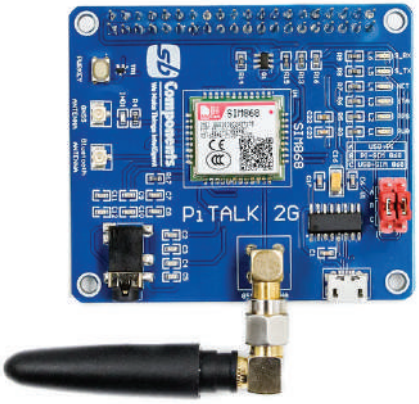
UHF RFID Lite HAT

Ultra High Frequency Board

SKU25077

The UHF RFID Lite HAT has the capacity to read up to 50 tags per second within a range of 2 meters.

The UHF technological system is essentially composed of 3 elements: a tag (also called transponder), an antenna, and a reading system called RFID Reader.



PiTalk 2G HAT

2G IoT GSM/GPRS/GNSS/Bluetooth HAT

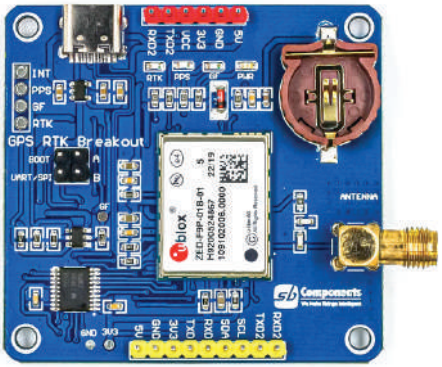
SKU25978

The main purpose of the PiTalk 2G HAT is to enable geeks and electronics enthusiasts to run various applications and programs on 2G networks. Based on SIM868, PiTalk 2G HAT features a high-performance GSM/GPRS engine as well as a GNSS engine.

PiTalk- 4G HAT

Quectel EG25-G Global BAND 4G LTE/ WCDMA/ GSM/ GPRS

SKU25985



PiTalk is a 4G cellular connectivity solution based on Quectel EG25-G LTE Cat 4 module intended for M2M and IoT applications, PiTalk supports data rates up to 150 Mbps downlink and 50 Mbps uplink, integrates GNSS support, and as its name implies you can also make and receive calls, or send/receive SMS messages for the device provide you connect a display, speaker, and microphone to the Raspberry Pi or other host device.

Touchsy - 3.2"

Touch LCD HAT - Capacitive

SKU26418

Touchsy HAT - the perfect solution for users who want to mount the display on their single-board computers. Here are the features and specifications that make Touchsy HAT a unique and must-have accessory for Raspberry Pi 4, 3, and other compatible single-board computers

LapPi 2.0 (Assembled)

Compatible with all Single Board Computers

SKU09688 SKU09664 SKU09640

LapPi 2.0 is one of a kind laptop which is completely DIY, meaning, the users can create this masterpiece from the scratch. Add your preferred single board computer and fix all other components which can also be upgraded whenever you like.

LapPi 2.0 is in its core is a superbly loaded computer, one of its kind and only one in such segment.

LapPi 2.0 (Unassembled)

Compatible with all Single Board Computers

SKU09749 SKU09756 SKU09701

The unassembled version is aa treat for our techie friends and electronic enthusiasts. As we mentioned, LapPi 2.0 is 100% 'Do It Yourself', you get all the components and parts in individual packing in a classy protective case. Assembly of the LapPi 2.0 is very easy. A step by step guide will be provided to assist you in assembling your machine.

Touchsy

3.2” Touch LCD HAT For Raspberry Pi

SKU26418

Capacitive

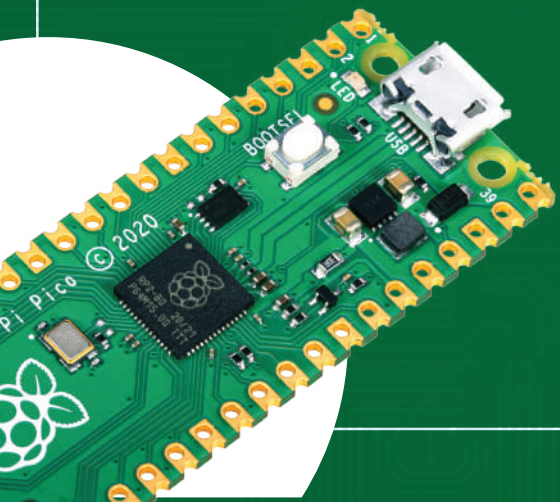
Touchsy HAT - the perfect solution for users who want to mount the display on their single-board computers. Here are the features and specifications that make Touchsy HAT a unique and must-have accessory for Raspberry Pi 4, 3, and other compatible single-board computers:

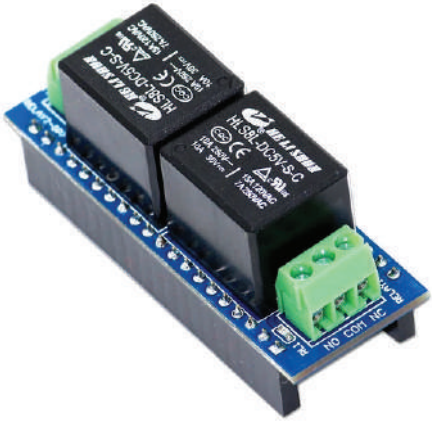
Raspberry Pi Pico

Raspberry Pi Pico is the first product built on **silicon designed by Raspberry Pi.**

At its heart is RP2040, a Raspberry Pi-designed chip, which features Dual Core ARM Cortex-M0+ clocked at 133MHz; 256KB RAM; 30 GPIO pins; and a broad range of interfacing options.

Raspberry Pi Pico is paired with 2MB of onboard QSPI Flash memory for code and data storage.





Pico Dual Channel Relay

Two-Channel high-quality relay to control the high voltage/current devices

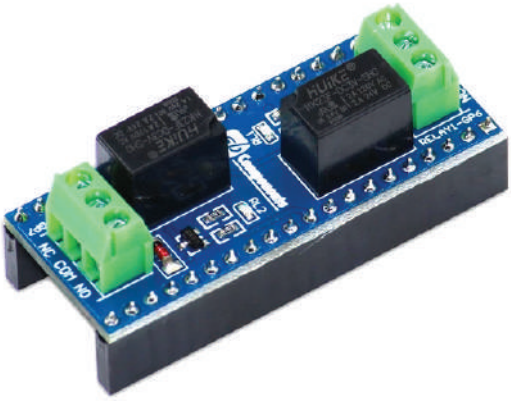
SKU21802

Pico Dual Channel Relay HAT is a Two-Channel high-quality relay with loads up to 250V AC/ 7A, 30V DC/ 10A to provide a way to control the high voltage/current devices.
It comes with a Female Pin Header, to easily connect with Raspberry Pi Pico via effortless stacking.

Pico 3V Relay HAT

Two-Channel high-quality relay to make devices smarter

SKU21376



Pico 3V Relay HAT is a Two-Channel high-quality relay with the Switching Voltage(VAC) up to 2A/ 120V(Max), Switching Voltage(VDC) up to 2A/ 24V(Max), and an operating voltage of 3.3V.
It comes with a Female Pin Header, to easily connect with Raspberry Pi Pico via effortless stacking.

Pico Round LCD HAT

Go beyond the limits of Raspberry Pi Pico with Pico 1.28" Round LCD HAT

SKU21697

Pico 1.28" Round LCD HAT is a 1.28-inch display HAT with 240 x 240 resolution, 65K RGB colors, clear and colorful displaying effect, and a joystick, designed for the Raspberry Pi Pico to expand its engagement via SPI communication. It features a 5-input joystick that is connected to the Pico 1.28" Round LCD HAT through a stackable GPIO connector header on the inside.

Pico 1.14 LCD HAT

Powerful Embedded Driver ST7789 and SPI Interface

SKU21512

A 1.14-inch display expansion board module of 240×135 resolution, 65K RGB colors, clear and colorful displaying effect, with a joystick, designed dedicatedly for Raspberry Pi Pico to expand its engagement via SPI communication by providing standard 40 pins GPIO interface. It is designed with a 5-input Joystick that will be internally connected to the 1.14" LCD HAT for Raspberry Pi Pico via a stackable GPIO connector header.

Pico Motor Driver HAT

Powered by one H-Bridge IC L293D to connect 2 DC motors simultaneously or 1 stepper motor

SKU21468

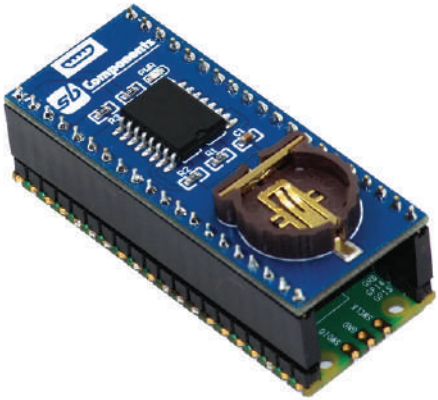
Pico Driver Motor HAT is a DC motor control module that is powered by one H-bridge IC L293D with the motor input supply range 6 V-12 V.

It is designed to connect 2 DC motors simultaneously or 1 stepper motor that would help the user to make projects in a compact size with high efficiency.

Pico RTC HAT

Real Time expansion module with the powerful IC DS3231

SKU21420



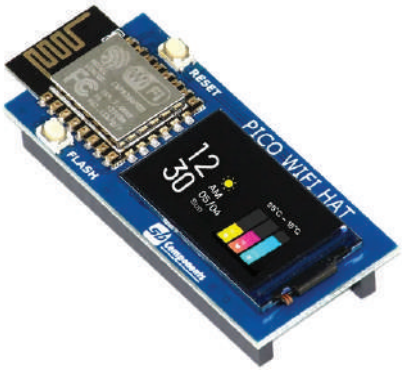
Real-Time clock expansion module with the powerful IC DS3231, backup battery holder, operating voltage 3.3 V, and Fast (400kHz) I2C Interface that measures the time which aligns the time of the device with the “Real-Time”.

It is developed with standard RPi Pico header that supports the Pico series to enhance its efficiency at a low cost.

Pico WiFi HAT

WiFi HAT for the Raspberry Pi Pico

SKU21888



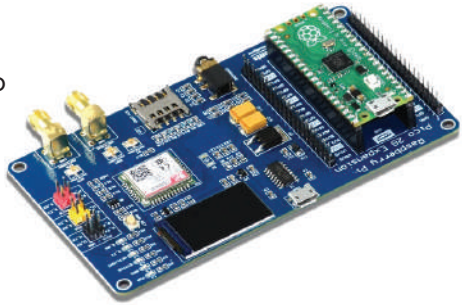
Raspberry Pi Pico WiFi HAT is a compact and easy-to-use WiFi HAT for the Raspberry Pi Pico that includes an ESP8266 module, 3.3 V Operating Voltage, and a 40-pin GPIO extension header that can be controlled via AT Command and supports TCP/UDP communication protocol.
The 1.14-inch LCD includes the ST7789 Driver and SPI Interface, decreasing the amount of IO pins required.

Pico 2G Expansion

QUAD-Band GSM/GPRS/GNSS Expansion for RPi Pico

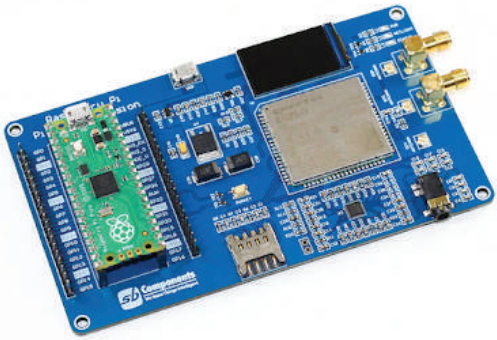
SKU21895

A QUAD-Band GSM/GPRS/GNSS Expansion designed dedicatedly for Raspberry Pi Pico with UART, USB 2.0 Interface, 850/900/1800/1900 MHz, Bluetooth 3.0 based on SIM868 module to perform easy and efficient communication.



Pico 2G Expansion works on the embedded TCP/UDP Protocols with Multi-constellation GNSS receiver support.

Pico 4G Expansion



Pico 4G Expansion-for easy and effective communication

SKU22748

The Raspberry Pi Pico 4G Expansion is a Quectel EG25-G module-based 4G Expansion board that includes an LTE category 4 module, built-in WiFi, multi-constellation GNSS, USB 2.0 High Speed Interface.

Pico Cube Unassembled

4x4x4 LED Cube HAT for Raspberry Pi Pico

SKU22380

4x4x4 LED Cube HAT for Raspberry Pi Pico with 5V DC operating voltage. Pico cube, a monochromatic(Red, Blue, Green) LED with 64, is a fun way to learn programming. It is designed to perform incandescent operations with low energy consumptions, robust outlook, and easy installation that make people/kids/users learn the effects of LED lights with a different pattern of colours via the combination of software and hardware i.e. Raspberry Pi Pico.

Pico Cube Assembled

4x4x4 LED Cube HAT for Raspberry Pi Pico - Assembled

SKU22687

4x4x4 LED Cube HAT for Raspberry Pi Pico with 5V DC operating voltage. Pico cube, a monochromatic(Red, Blue, Green) LED with 64, is a fun way to learn programming. It is designed to perform incandescent operations with low energy consumptions, robust outlook, and easy installation that make people/kids/users learn the effects of LED lights with a different pattern of colours via the combination of software and hardware i.e. Raspberry Pi Pico.

Pico Air WiFi Monitoring Expansion

IoT enabled compact particulate matter monitoring device

SKU22342

Pico Air WiFi Monitoring Expansion consists of an open-source portable sensor that has the ability to provide the level of quantity of the suspended particulates with their mass.

Pico Air Monitoring Expansion

Robust Particulate Matter Monitor with cutting-edge technology

SKU21819

Air Monitoring Expansion for Raspberry Pi Pico is an open-source portable sensor that has the ability to provide the level of quantity of the suspended particulates with their mass. Pico Air Monitoring Expansion works on operating voltage of 5V with a hi-tech Digital Laser Dust Sensor, PMSA003, sensor with on-board 0.91" OLED Display,

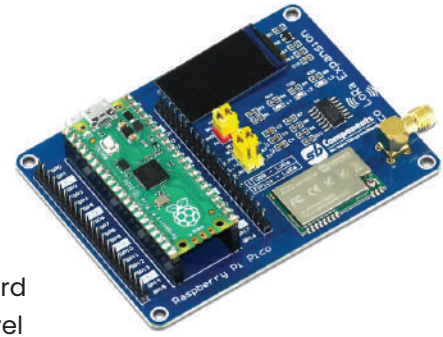
Pico LoRa™ Expansion

Build a highly efficient data transmission system up to 5 KM

SKU21642 **433MHz**

SKU21628 **868MHz**

SKU22724 **915MHz**



It is a low-power consumption data transmission board, comes with an onboard CH340 USB TO UART converter, Voltage Level Translator(74HC125V), E22-900T22S SMA antenna connector that covers 868MHz frequency band. Pico LoRa™ Expansion is developed to enable data transmission up to 5 KM through serial port.

Pico Zero Board

Long-term, safe, compact and convenient housing solutions for your DIY Circuits

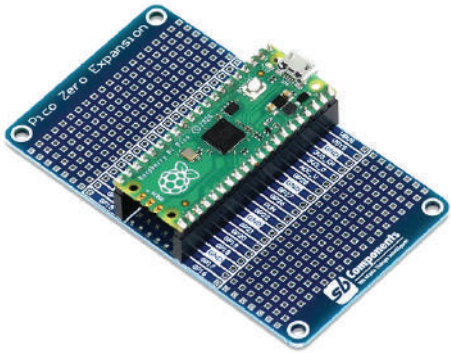
SKU21499

Pico Zero Board is an advantageous and neatly labelled board with a 6x20 grid of 2.54mm spacing mounting holes suitable for users to easily solder the Pico pins. Pico Zero Board provides a secure, compact and long term safe house to your breadboard Project with perfectly attaching custom circuits!

Pico Zero Expansion

Long-term, safe, compact and convenient housing solutions for your DIY Circuits

SKU21505



Raspberry Pi Pico is a compact and low cost microcontroller that creates vast opportunities for all the Tech-Lovers to create something smart and efficient Project! Pico Zero Expansion has the design to get attached with the Pico with the help of which a user can connect sensors and other hardware's that would let it transform into an advanced prototype.

UHF RFID Lite Pico Expansion Board

Reads up to 50 tags per second within a range of 2 meters

HF RFID Lite HAT is a device that operates in the Ultra-High Frequency (UHF) band, which spans 840 MHz to 960 MHz. Due to its greater read range than HF NFC scanners, one reader may interact with several tags at once, quickly, and within 2 meters of each other.

Barcode HAT For Pico

Designed to scan 20 different barcode symbologies for both 1D and 2D symbologies

SKU22441

Barcode HAT for Pico is a robust and compact barcode scanner board that consists of DE2120 scanner module, buzzer, 1.14" LCD screen, micro-USB port. It is designed to scan 20 different barcode symbologies in the segment of both 1D and 2D symbology like barcodes and QR codes.

Raspberry Pi Pico Relay Board

Control up to 4 appliances and make them smarter

SKU21178

Raspberry Pi Pico Relay Board can control up to 4 appliances and loads up to 250V AC@ 7A, 30V DC@ 10A. It provides a way for the users to control the high voltage/current devices. Our research and development team built the Raspberry Pi Pico Relay Board to enhance the intelligence of the appliances. It comprises an "Optocoupler" that allows the circuit to transmit an electrical signal between two isolated circuits through light energy.

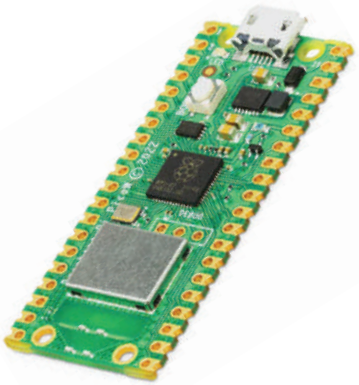
Raspberry Pi Pico RFID Expansion

Read information of stored ID on Keyfob and Tags

SKU21192

This is the latest technology in the range of SB Components products boasting an advanced RFID Reader at the frequency of 125KHz with a compact design that has a programmable 0.91" OLED Display and, an updated UART/I2C interface running, that is compatible with Raspberry Pi Pico.

Raspberry Pi Pico W



Now has an integrated Infineon CYW43439 wireless chip

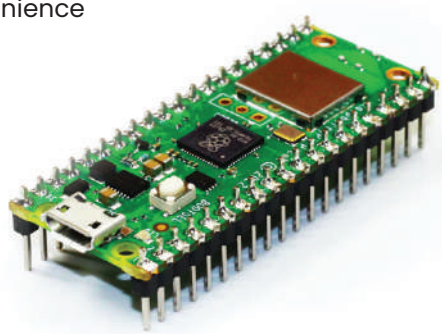
SKU24735

Raspberry Pi Pico is a small, quick, and an adaptable board built using the RP2040, a microcontroller chip manufactured by Raspberry Pi. It now has an integrated Infineon CYW43439 wireless chip. The Raspberry Pi Pico W and Pico WH are equipped with an Infineon CYW43439 wireless chip. The CYW43439 supports IEEE 802.11 b/g/n wireless LAN as well as Bluetooth 5.2; however, only wireless LAN is supported at launch.

Raspberry Pi Pico W with Header

has a pre-soldered 40-way header and
a 3-pin JTAG connection for improved convenience

SKU24742



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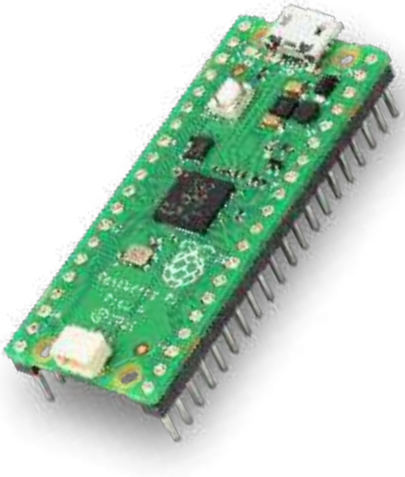
Raspberry Pi Pico H



First product built on Silicon designed, by RPi

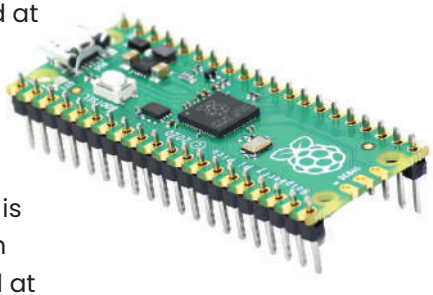
SKU24728

Raspberry Pi Pico is the first product built on silicon designed by Raspberry Pi. At its heart is RP2040, a Raspberry Pi-designed chip, which features Dual Core ARM Cortex-M0+ clocked at 133MHz; 256KB RAM; 30 GPIO pins; and a broad range of interfacing options. Raspberry Pi Pico is paired with 2MB of onboard QSPI Flash memory for code and data storage.

Raspberry Pi Pico Board With Soldered Header

Features Dual Core ARM Cortex-M0+ clocked at 133MHz; 256KB RA

SKU20904



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Raspberry Pi Pico Board

Features Dual Core ARM Cortex-M0+ clocked at 133MHz; 256KB RA

SKU20904

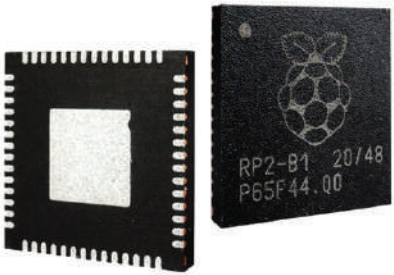
Raspberry Pi Pico is the first product built on silicon designed by Raspberry Pi. At its heart is RP2040, a Raspberry Pi-designed chip, which features Dual Core ARM Cortex-M0+ clocked at 133MHz; 256KB RAM; 30 GPIO pins; and a broad range of interfacing options. Raspberry Pi Pico is paired with 2MB of onboard QSPI Flash memory for code and data storage.

RP2040 Microcontroller

High Performance, Low Cost, Small Package

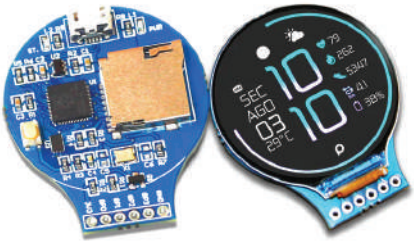
SKU21680

RP2040 is an advanced microcontroller with flexible digital interfaces that has a surprising amount of efficiency and power for a low price in a compact size. It consists of a low-power ARM processor and dual Arm Cortex-M0+ processors(up to 133MHz), embedded 264KB of on-chip RAM, DMA controller, 2 × UARTs, 2 × SPI controllers, and 2 × I2C controllers



Roundy

Round LCD Board based on RP2040/ESP- 12E



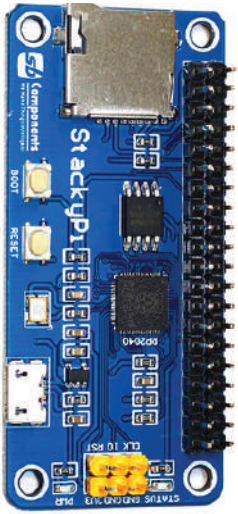
SKU24018

Roundy is a 1.28-inch round LCD display based on RP2040/ESP-12E, RoundyPi is based on Raspberry Pi's dual-core RP2040 microcontroller, and RoundyFi is an ESP-12E MCU capable of running at 80 or 160MHz with built-in support for 802.11b/g/n Wi-Fi. The ESP-12E is particularly praised for its efficiency and ease of use.

StackyPi

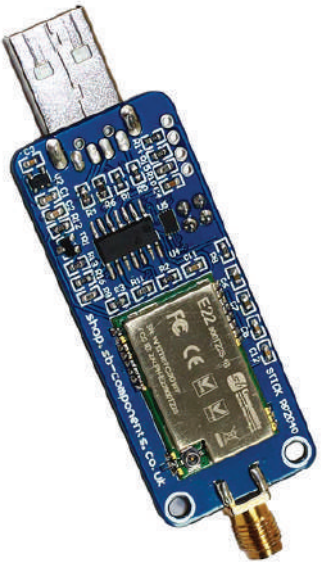
A board on which, clear and descriptive pin labels make the process easier for the use

SKU24032



StackyPi is a compact and advanced board that is designed with the RP2040 Micro-controller, which provides one set of 2x20 pin headers on which you can connect Raspberry Pi HATs. It means that one can plug HAT designed for Raspberry Pi and run it via the Pico Zero RP2040 that would make the user perform the advanced functions on it.

RangePi



Portable low cost, plug and play solution based on LoRa

SKU23004 **433MHz**

SKU23004 **868MHz**

SKU23004 **915MHz**

You may not be acquainted with LoRa, but you are probably familiar with the Internet of Things, and LoRa is set to alter the IoT.
It's a wireless technology that's used for automatic meter reading, smart parking, and livestock tracking, among other things.

Pico Breadboard Kit

Multi-purpose Kit for programmingGPIOs of RPi Pico

SKU20843

Raspberry Pi Pico Breadboard Kit is a multi-purpose Kit that consists of a “400 points half-size breadboard” on top, a Programmable Buzzer, 4 Programmable LEDs, 4 Push buttons, and dedicated 5V, 3v3, and GND pins at a single place. SB Components developed Raspberry Pi Pico Breadboard Kit with advanced features like independently controllable LEDs, Switches, a 400 points half-size breadboard that helps the user to prototype their projects with Raspberry Pi Pico in an efficient way.

GatePi

4 Channel Relay with LoRa Module based on RP2040

SKU23233 **433MHz**

SKU23240 **868MHz**

SKU23257 **915MHz**

GatePi is a low-power data transmission board with an onboard CH340 USB TO UART converter, 74HC125V Voltage Level Translator, E22-400T22S/E22-900T22S SMA antenna connector that covers the 433/868/915 MHz frequency band, 4-Ch Relays, IPEX antenna connector, and LoRaTM Spread Spectrum Modulation technology with auto multi-level repeating. GatePi is a serial port data transmission device that can send data up to 5 kilometers.

AiryFi

Air Quality Monitoring Station based on ESP8266

SKU24933

AiryFi is an open-source portable sensor that can deliver the quantity and mass of suspended particulates.

It includes a PMSA003 sensor that uses a digital output with a 5V working voltage to offer information on suspended particulate matter (PM1.0, PM2.5, and PM10) in the air per unit volume.

EncroPi

Read, Encrypt & Store your data in real time

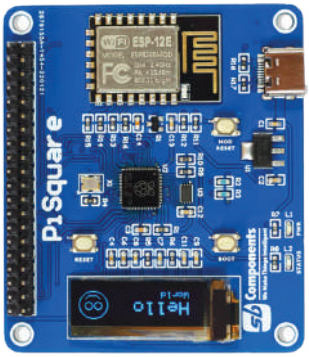
SKU24865

EncroPi is an innovative and highly efficient USB RTC stick based on the Raspberry Pi RP2040 microcontroller. It is a power booster product for all electronic enthusiasts and time setters. We have designed EncroPi in such a way that its powerful and advanced features will help you in your projects seamlessly.

PiSquare

Economical and Compact solution to run Multiple HATs

SKU24186



PiSquare is an RP2040 & ESP-12E based board enabling a smart way to use multiple Raspberry Pi HATs without actually stacking on Raspberry Pi.

It uses Socket programming to communicate "n numbers of HATs wirelessly at the same time.

IoTPi- 4 Channel

4 Channel Industrial IoT board based on RP2040

SKU24162

IoTPi is an industrial board that consists of onboard RP2040 that can control up to 4 appliances/devices on a load of photo-coupling

isolation Optocoupler EL357NC, allowing users to safely control high voltages or current devices. IoTPi makes appliances smart, which users can operate via the PiRelay app on their electronic device.

IoTPi- 6 Channel

6 Channel Industrial IoT board based on RP2040

SKU24179

IoTPi is an industrial board that consists of onboard RP2040 that can control up to 6 appliances/ devices on a load of photo-coupling

isolation Optocoupler EL357NC, allowing users to safely control high voltages or current devices. IoTPi makes appliances smart, which users can operate via the PiRelay app on their electronic device.

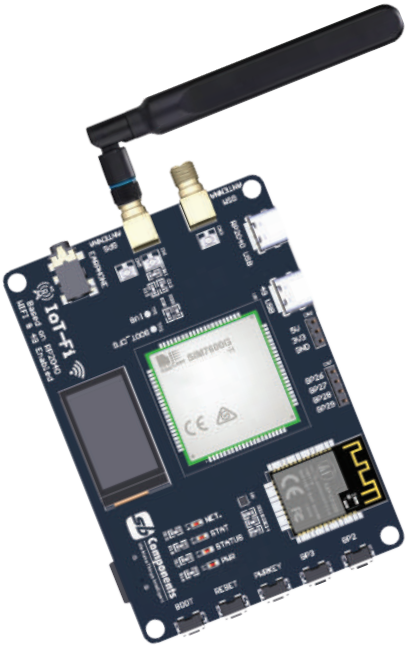
IoTFi 2G

All-in-One IoT Board based on RP2040

SKU24919

IoTFi is a compact yet powerful board based on RP2040 that is loaded with an in-built GPS technology and Wi-Fi ESP32 for an exceptional wireless experience.

The board is equipped with a 3.5 mm audio jack, micro SIM slot for SIM868/ ,an SD card slot and a type C connector, a high-resolution 1.14" LCD, accelerometer and Bluetooth 2.0 module.



IoTFi 4G

All-in-One IoT Board based on RP2040

SKU24926

IoTFi is a compact yet powerful board based on RP2040 that is loaded with an in-built GPS technology and Wi-Fi ESP32 for an exceptional wireless experience.

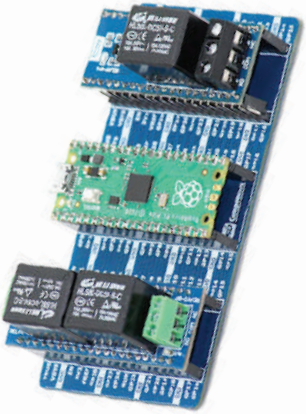
The board is equipped with a 3.5 mm audio jack, micro SIM slot for SIM7600G, an SD card slot and a type C connector, a high-resolution 1.14" LCD, accelerometer and Bluetooth 2.0 module.

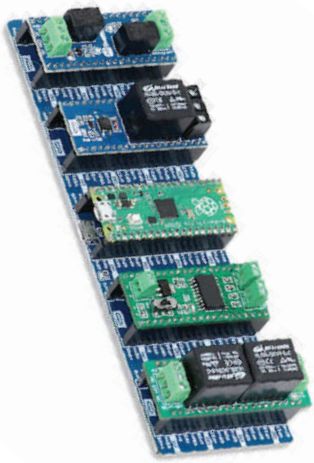
Pico 2 Channel Expander

Connects up to 2 HATs/ Shields

SKU21314

Provides an easy and quick way to access all the GPIO pins of Raspberry Pi Pico. It will help the users to make prototypes of their projects based on the Raspberry Pi Pico. Make the utilization of Raspberry Pi double with Pico 2 CH Expander and build powerful products.





Pico 4 Channel Expander

Connects up to 4 HATs/ Shields

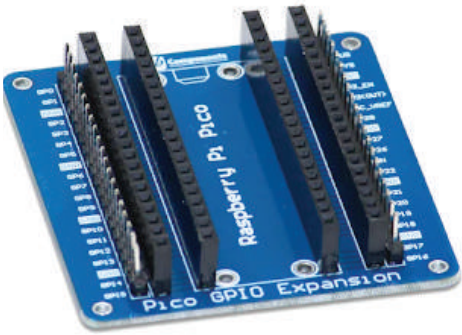
SKU21352

Pico 4 Channel Expander is an I/O Expansion board designed for Raspberry Pi Pico to expand its engagement via the four sets of GPIO ports dedicated to the HAT or Shield. Pico 4 Channel Expander is designed to work as a GPIO extender by providing four sets of 2 x 20 pin headers for the connection with HATs or Breadboards.

Raspberry Pi Pico GPIO Expansion Board

Helps to break out all Pins and Power of RPi Pico development board

SKU20812



Raspberry Pi Pico GPIO Expansion Board is an expansion board to break out all the pins and power of the Raspberry Pi Pico board via two ways(male or female header). It allows the user to connect it to other components with the help of a jumper wire.

Sense HAT For Pico

Assist you in keeping track of your surrounding environment

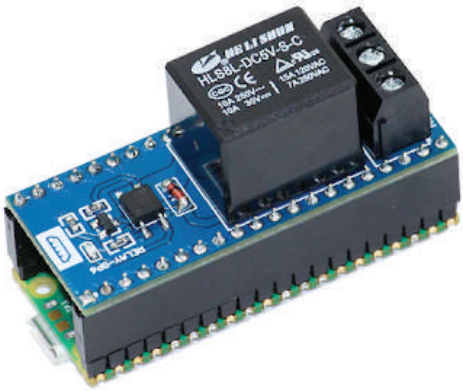
SKU22366

Sense HAT for Raspberry Pi Pico is a four-sensor environment monitoring device that measures temperature, air quality, humidity, and colour. The Sense HAT board is perfect for the environment monitoring project since it has multi-sensors with the ability to measure temperature, humidity, air quality and colours. A stylish 1.14" LCD screen is also installed on the board, allowing the user to quickly see the data from the sensors on the screen.

Pico Single Channel Relay HAT

High-quality components with powerful Optolsolated output

SKU21277



Pico Single Channel Relay HAT is a single channel High-quality relay with loads up to 250V AC/ 7 A, 30V DC/ 10A to provide a way to control the high voltage/current devices. It comes with a Female Pin Header, to easily connect with Raspberry Pi Pico via effortless stacking. It is designed to be compatible with Raspberry Pi Pico which enhances the utilization of Raspberry Pi Pico with the combination of the relay.

HackyPi

Compact DIY USB Hacking Tool

SKU26098

HackyPi is a learning and educational tool for aspiring ethical hackers and coders. It enables users to explore various topics such as data logging, encryption, and coding. This tool is built around the Raspberry Pi RP2040 microcontroller, which has two powerful ARM Cortex-M0+ cores.

Squary Pi

Compact 1.54" LCD Board based on RP2040

SKU25619

SquaryPi is a square LCD display based on the RP2040, with a tiny and attractive 1.54-inch display module with 240x240 pixels resolution and 350 nits brightness. Its 65K RGB colors and apparent vivid visual effect allow it to broaden its engagement with your project.

Pressure Sensor

SKU26173

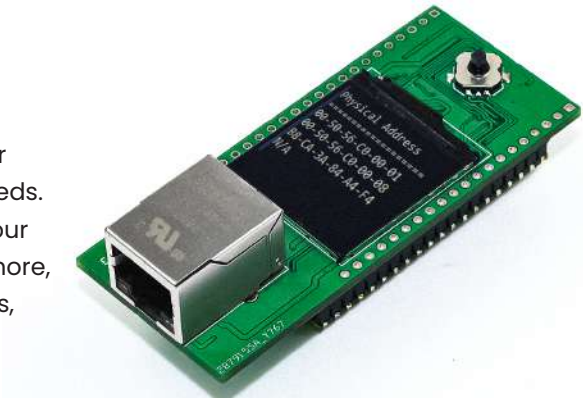
This new edition has NXP's MPXV5010DP sensor which is an integrated on-chip silicon pressure sensor that is signal-conditioned, temperature compensated and calibrated. Two axial ports are included in the Pressure Sensor Board for Pico to allow industrial-grade tubing. The sensor's maximum error rate between 0 and 85 degrees Celsius is 5.0%. It communicates with the target microcontroller over the SPI interface (CS, SCK, MISO).

NetPi

Ethernet HAT for Raspberry Pi Pico

SKU26166

NetPi is the perfect solution for your Raspberry Pi Pico's connectivity needs. It's an Ethernet HAT that enables your Pico to easi UDP, ICMP, IPv4, and more, NetPi can create IoT devices, robots, home automation systems, and industrial control systems.

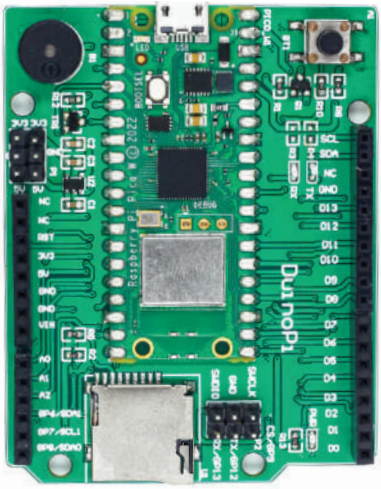


ArdiPi

Ardi, the ultimate Arduino Uno alternative

SKU26630

Ardi, the ultimate Arduino Uno alternative packed with powerful specs and exciting features. you choose ArdiPi you can enjoy a low-cost solution with access to the largest support communities for Rasberry Pi

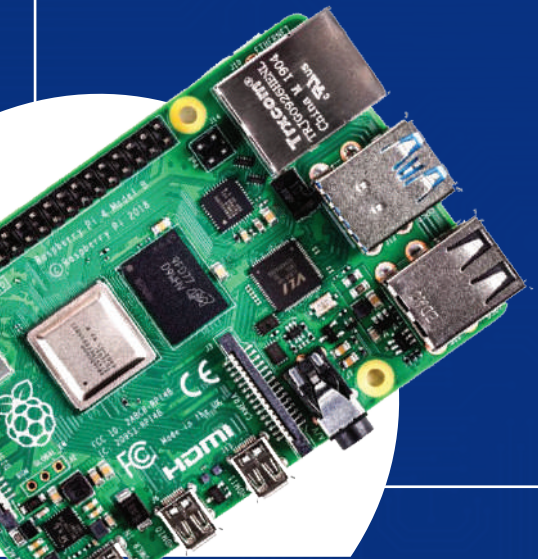


Raspberry Pi

Raspberry Pi, the **low-cost, credit card-sized single-board series,** integrates CPU, GPU, RAM ports and other components on board with all-in-one packages in one built-in circuit.

It was developed in 2012 by the Raspberry Pi Foundation, a non-profit organisation in the UK, to place computing technology and digital production in the hands of the world's people.

Raspberry Pi hardware can perform the tasks of a desktop in an inexpensive and compact way, like playing HD videos, web browsing, games, etc.



Raspberry Pi 4 Clear Case with/without Fan

SKU12596

Raspberry Pi 4 Black Case with/without Fan

SKU12589

Raspberry Pi 4, 3B+,3, 2 Bumper Case

SKU07110

PiShell (Multicolor)

SKU08001

SPi-Box
Black Case

SKU03273

SPi-Box
White Case

SKU03266

Raspberry Pi 2, 3, 3B+ Closed Case, Black

SKU02757

Raspberry Pi 2, 3, 3B+ Closed Case, White

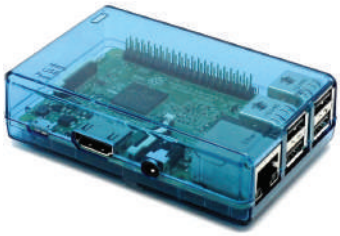
SKU027711

Raspberry Pi 2, 3, 3B+ Closed Case, Clear

SKU02740

Raspberry Pi 2, 3, 3B+ Closed Case, Blue

SKU02764



Raspberry Pi 2, 3, 3B+ Open Case, Black

SKU02719

Raspberry Pi 2, 3, 3B+ Open Case, White

SKU02726

Raspberry Pi 2, 3, 3B+ Open Case, Clear

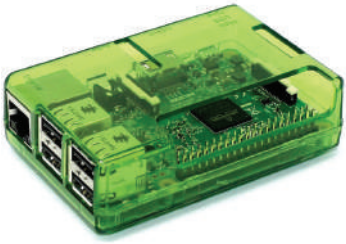
SKU02696

Raspberry Pi 2, 3, 3B+ Open Case, Blue

SKU02702

Raspberry Pi 2, 3, 3B+ Open Case, Green

SKU02733



Raspberry Pi 2, 3, 3B+ & 3.2" LCD (Black)

SKU02993

Raspberry Pi 2, 3, 3B+ & 3.2" LCD (Blue)

SKU02986

Raspberry Pi 2, 3, 3B+ & 3.2" LCD (Clear)

SKU02979

Raspberry Pi Zero White Case

SKU04737

Raspberry Pi Zero Black Case

SKU04713

Raspberry Pi Zero Clear Case

SKU04706

PiFace Digital 2 Clear Case

SKU03105

PiFace Digital 2 Black Case

SKU03105

PiStart

SKU07196

Raspberry Pi Model B Closed Case, White

SKU00548

Raspberry Pi Model A+ (Black)

SKU03211

Raspberry Pi Model A+ Clear Case

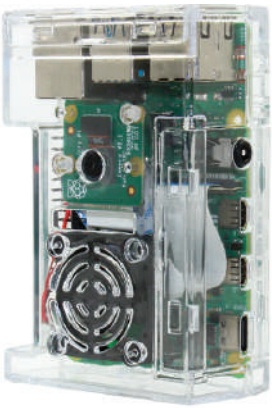
SKU03204

Raspberry Pi Model B+ Clear Case

SKU01286

PiShell 2 (Clear)

SKU25862



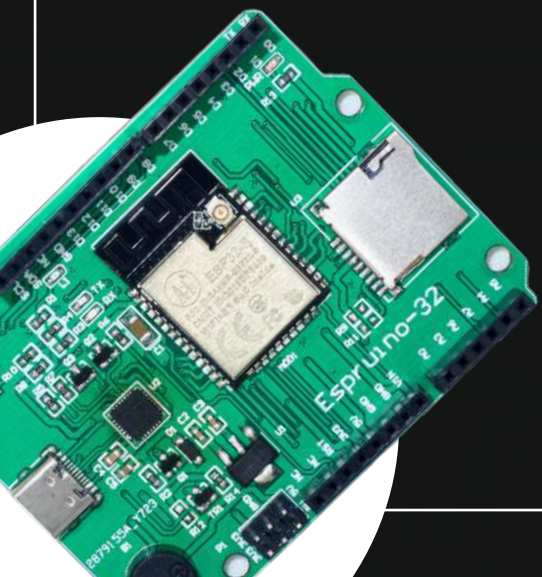
PiShell 2 (Black)

SKU25862

Espressif Systems

Espressif Systems (688018.SH) is a public multinational, fabless semiconductor company established in 2008, with offices in China, the Czech Republic, India, Singapore and Brazil. We have a passionate team of engineers and scientists from all over the world, focused on developing cutting-edge wireless communication, low-power, AIoT solutions.

The advent of Artificial Intelligence has spurred the development of products that require secure and fast wireless connectivity. As a world-leading AIoT platform, Espressif Systems provides millions of users with a variety of secure AIoT solutions.

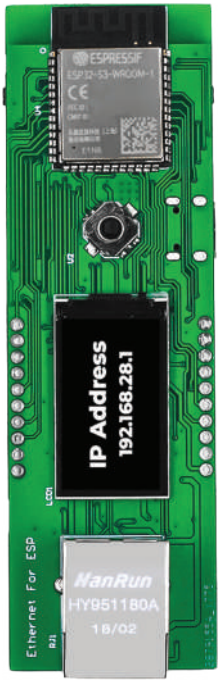


SquaryFI

Compact 1.54" LCD Board based on ESP-12E

SKU25626

SquaryFi is an ESP-12E-based square LCD display with a compact and appealing 1.54-inch display module with 240x240 pixels resolution and 350 nits brightness. This wi-fi device has 65K RGB colors and a clear and vivid presenting effect that opens many more possibilities to boost its engagement with all of your projects.



ESPi

Access the internet - anywhere, anytime!

SKU26616

Espressif Systems ESP32 processor supports WiFi, Bluetooth, and Ethernet connectivity. But there ESPi boards coming with an Ethernet RJ45 jack out of the box, if you'd like a cheaper and tinier ESP32 board with Ethernet, Wireless ESPi may be an option for projects not requiring PoE support. It supporting a number of internet protocols, including TCP, UDP, WOL over UDP, ICMP, and IPv4.

Touchsy

3.2" Touch LCD based on ESP

SKU26449
Capacitive

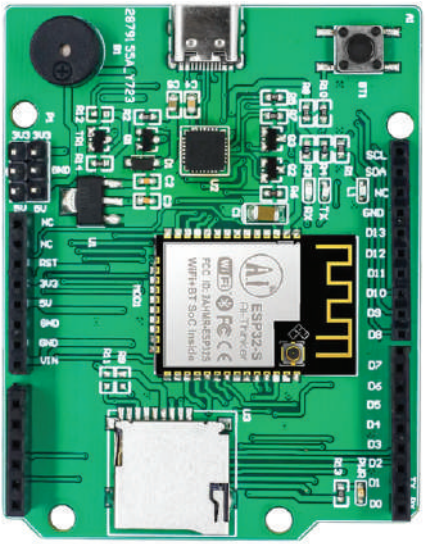
SKU26456
Resistive

Touchsy ESP-32 - the perfect display solution for users who prefer ESP-32 over Raspberry Pi Pico W. Here are the features and specifications that make Touchsy ESP-32 a unique and must-have accessory:

ArdiPi-32

Ardi, the ultimate Arduino Uno alternative

SKU26647



Introducing Ardi - Ardi, the ultimate Arduino Uno alternative packed with powerful specs and exciting features. Ardi32, you can enjoy a low-cost solution with access to the largest support communities for ESP32.

Breakout

Espressif Systems (688018.SH) is a public multinational, fabless semiconductor company established in 2008, with offices in China, the Czech Republic, India, Singapore and Brazil. We have a passionate team of engineers and scientists from all over the world, focused on developing cutting-edge wireless communication, low-power, AIoT solutions.

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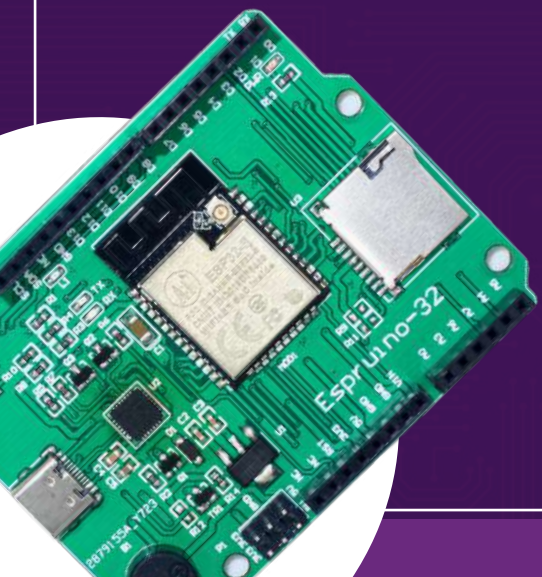


PiTalk 4G IoT Dongle

Read Multiple Tags within 1.5mtrs Range

SKU25992

PiTalk 4G dongle is a USB dongle with a 4G cellular connectivity solution based on Quectel EG25-G LTE Cat 4 module intended for M2M and IoT applications, PiTalk supports data rates up to 150 Mbps down-link and 50 Mbps uplink, integrates GNSS support, and as its name implies you can also make and receive calls, or send/re-ceive SMS messages, etc.

Touchsy - 3.2"

3.2" Touch LCD Breakout

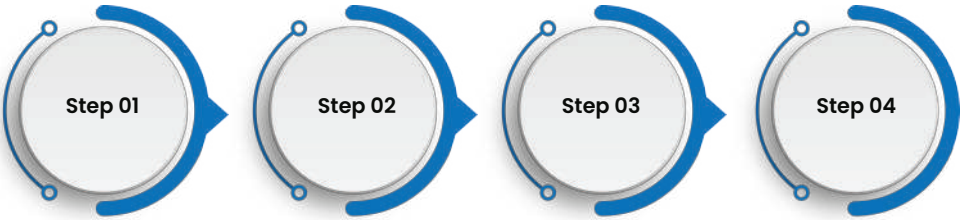
SKU26463 Capacitive

SKU26470 Resistive

Touchsy Breakout - the perfect display solution for users who prefer using Arduino or other controllers. Here are the features and specifications that make Touchsy Breakout a unique and must-have accessory:

Customizations

- PCB Customization
- Enclosure Customization
- Hardware Customization
- Branding

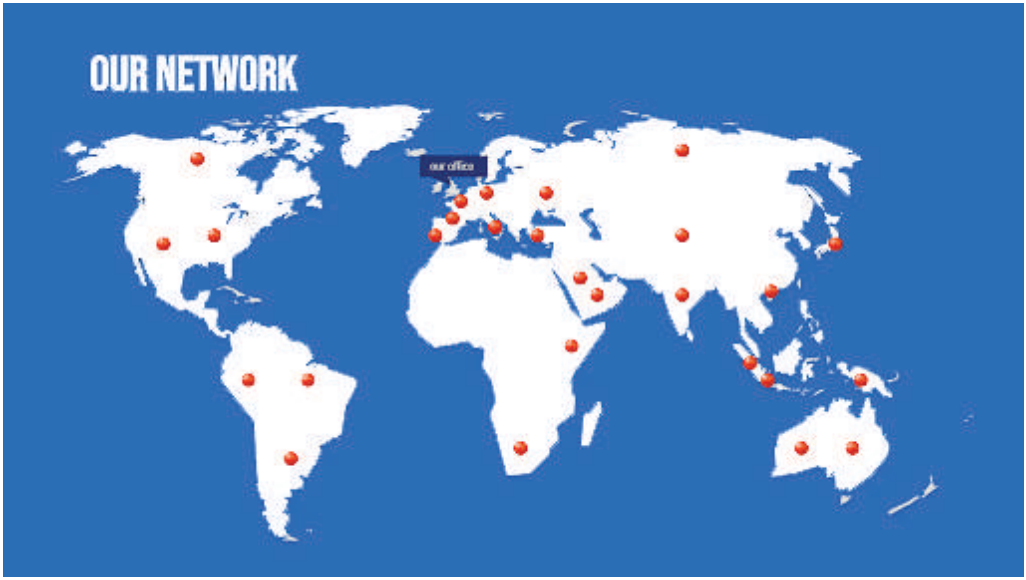


Project Discussion & Quotation

R&D and Sample Appoval

Final Production

Delivery



Website

eShop

Wholesale

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Whatsapp : +44 77565 35764

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