



M5STACK 2026 PRODUCT CATALOG

Build Fast, Stack Smart

Build Fast, Stack Smart.

About M5Stack

M5Stack is a leading provider of modular, open-source IoT development solutions. Our stackable hardware and intuitive programming platform empower developers and businesses to accelerate innovation and rapidly prototype solutions for IIoT, home automation, smart retail, and STEM education.

Modular **5cm x 5cm** **STACK**able



3 million+

M5 Products Sold Globally



18%

of Annual Revenue
Invested in R&D



10

Product Lineups

500+

SKUs Available



50+

IIoT Applications



50+

Global Distributors



Founded in China in

2017



181,000+

Global Maker & Developer
Community



660,000+

UiFlow Code Downloads



110+

Countries Coverage

M5STACK

Contents

01

Main Controller

ESP32 Microcontroller |
Highly Extensible |
Industry-Grade Quality

02

Expandable Functional Modules

Communication | I/O | Driver | Power

03

Sensors & Actuators

Environmental |
Motion | Light

04

Hobby & Accessories

DIY Kits | Cables | Mounts

05

Software Platform

UIFlow – Graphic
Coding IDE



Main Controller


ESP32 Microcontroller | Highly Extensible | Industry-Grade Quality

StackChan SKU: K151


• Main Controller	ESP32-S3, Xtensa® dual-core 32-bit LX7, 240 MHz, 16MB Flash, 8MB Quad PSRAM	• Human Interactions	1W speaker, AW88298 16-bit I2S power amplifier, RGB LEDs WS2812C * 12 Power and reset buttons, Power indicator LED
• Wireless Connectivity	2.4 GHz Wi-Fi, IEEE 802.11 b/g/n, Bluetooth® 5 LE	• Expansions	microSD card slot, Grove interface * 3, LEGO®-compatible mounting holes
• Wired Connectivity	USB CDC & full-speed USB OTG, GPIO, UART, I2C	• Motors	360-degree horizontal servo with feedback 90-degree vertical servo with feedback
• Display	2.0-inch IPS LCD, resolution 320*240, 65536 colors, ILI9342C driver, Capacitive multi-touch	• Power	550 mAh battery, USB-C power and data, Power management IC AXP2101, RTC BM8563
• Sensors	Dual microphones, ES7210 audio codec, Proximity & ambient light sensor LTR-553ALS-WA 9-axis IMU BMI270 + BMM150 (accelerometer + gyroscope + magnetometer)	• Camera	GC0308, 640*480, 0.3 MP

StackChan is a super kawaii AI desktop robot co-created by M5Stack and the user community. It uses the M5Stack flagship IoT development kit CoreS3 as its main controller, powered by an ESP32-S3 SoC featuring a 240 MHz dual-core processor, with 16MB Flash and 8MB PSRAM onboard, and supporting Wi-Fi and BLE. The main unit also integrates a 2.0-inch capacitive touch display with a high-strength glass cover, a 0.3 MP camera, a proximity & ambient light sensor, a 9-axis IMU (accelerometer + gyroscope + magnetometer), a microSD card slot, a 1W speaker, dual microphones, and power/reset buttons.

SPECIAL THANKS

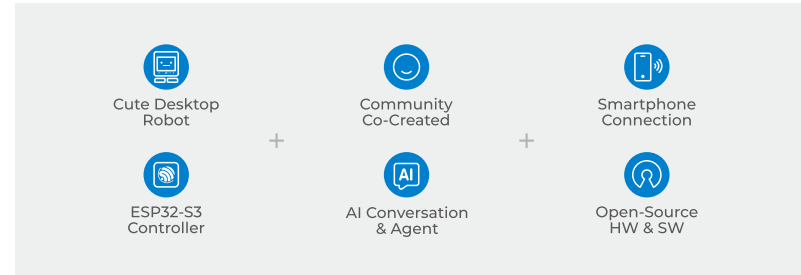


Shinya Ishikawa
@stack_chan



Takao Akaki
@mongonta555

And the StackChan community

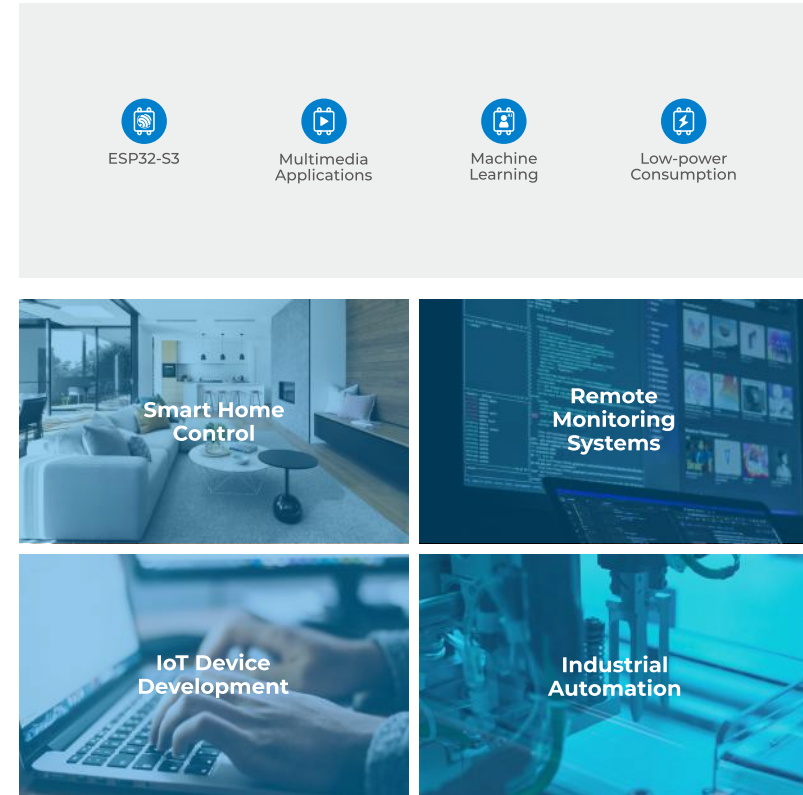


CoreS3

SKU: K128

• SoC	ESP32-S3@Xtensa LX7, 16MB Flash & 8MB PSRAM, Wi-Fi, USB OTG	• Speaker	16-bit I2S amplifier AW88298 @1W
• Touch IPS LCD Screen	2.0" @320 x 240 ILI9342C	• Audio Codec	ES7210, dual-microphone input
• Camera	GC0308 0.3MP	• Product Size	Whole set (CoreS3+DinBase): 69.0 x 54.0 x 31.5mm Main unit (CoreS3): 54.0 x 54.0 x 15.5mm
• Proximity Sensor	LTR-553ALS-WA	• Product Weight	72.7g
• Power Management	AXP2101	• Packaging Size	105.6 x 66.0 x 35.3mm
• Six-axis IMU	BMI270	• Gross Weight	101.8g
• Three-axis Magnetometer	BMM150		
• RTC	BM8563		

CoreS3 is the third-generation main unit of the M5Stack development kit series. Its core controller uses the ESP32-S3 solution, featuring a dual-core Xtensa LX7 processor with a main frequency of 240MHz. It comes with WiFi functionality, onboard 16MB Flash and 8MB PSRAM, and supports program downloading via the Type-C interface. It also supports OTG and CDC functions, making it easy to connect USB devices and flash firmware.

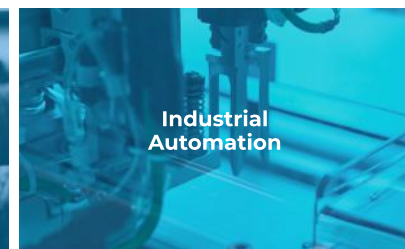
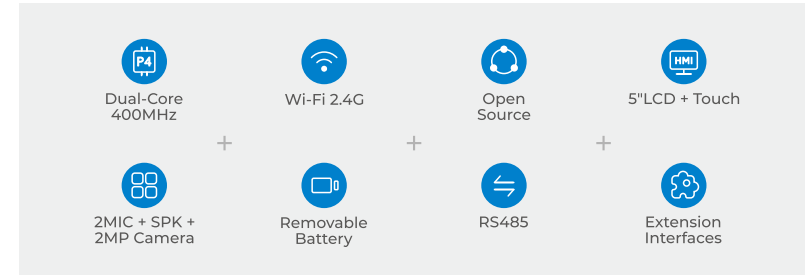


Tab5

SKU: K145/C145

• Main Controller SoC	ESP32-P4NRW32 (RISC-V 32-bit dual-core 400 MHz + LP single-core 40 MHz)	• RS-485 Port	SIT3088 (120Ω switchable terminator) supply range 6 ~ 24V
• Wireless Module SoC	ESP32-C6-MINI-1U (Wi-Fi 6 @ 2.4 GHz / Thread / ZigBee)	• Expansion Ports	1 × HY2.0-4P, 1 × M5-Bus, GPIO_EXT expansion bus
• Display	5-inch IPS TFT (1280 × 720)	• Motion Sensor	BMI270 6-axis (accelerometer + gyroscope, interrupt wake-up)
• Touch	GT911 multi-touch controller (I2C)	• RTC	RX8130CE (timed interrupt wake-up)
• Camera	SC2356 2MP (1600 × 1200), via MIPI-CSI	• Reset/Boot Button	1 × Button (power on/off & download mode)
• Microphone	Dual-microphone array (AEC)	• Charge Management	IP2326 charge-management IC
• Speaker	1W @ 8Ω NS4150B	• Power Monitoring	INA226 (bus current/voltage)
• USB Ports	USB Type-A (Host), USB Type-C (USB 2.0 OTG)	• Battery	NP-F550 Li-ion battery, 7.4V@2000mAh (14.8Wh)

Tab5 is a highly extensible, portable smart IoT terminal development device designed for developers, integrating a dual-chip architecture and abundant hardware resources. Its main controller adopts the RISC-V-based ESP32-P4 SoC, equipped with 16MB Flash and 32MB PSRAM; the wireless module uses the ESP32-C6-MINI-1U, supporting Wi-Fi 6.

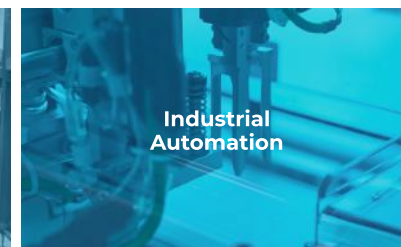
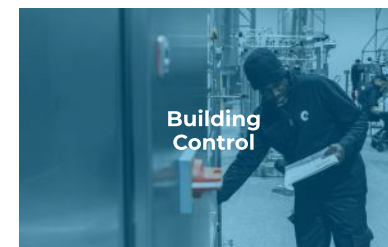
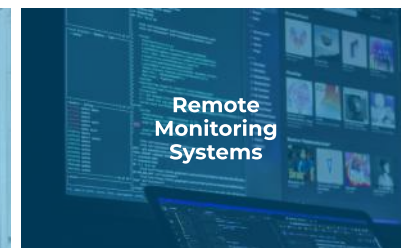
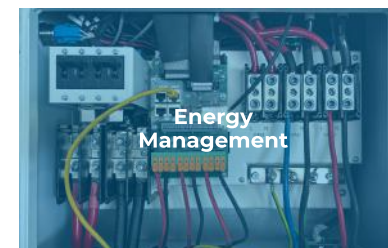
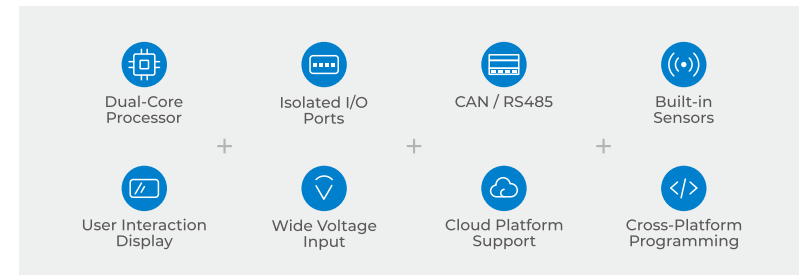
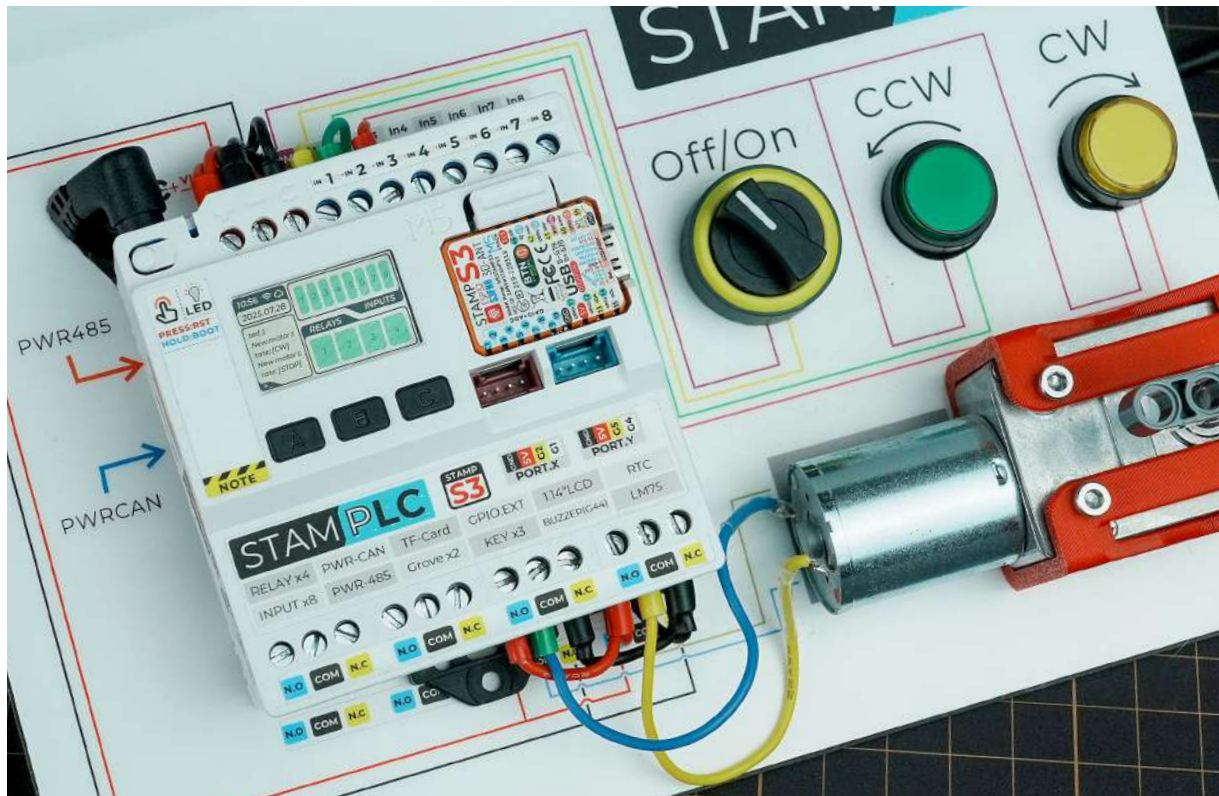


StamPLC

SKU: K141

• Control Module	StampS3A Control Module, based on ESP32-S3FN8, with 8MB Flash, 2.4 GHz Wi-Fi	• PWR-CAN Interface	XT30(2+2)PW-M
• FLASH	8MB	• PWR-485 Interface	HT3.96-4P
• Digital Inputs	8 opto-isolated digital inputs, Input voltage range: DC 5-36V	• Interactive Controls	1 RESET/BOOT button, 3 user buttons, buzzer
• Digital Outputs	4 relay outputs	• Sensors	LM75 temperature sensor, INA226 voltage/current sensor, RTC (RX8130CE)
• Relays	AC 5A@250V DC 5A@28V	• Data Storage	Built-in microSD card slot
• DC Power Supply	Supports wide voltage input of DC 6 ~ 36V@1A DC Power Connector: DC5521	• IO Port Load Capacity	2x8 expansion interface maximum load: DC 4.76V@700mA
• Expansion Interfaces	GPIO.EXT interface, 2 HY2.0-4P interfaces	• Installation Method	DIN rail mounting
• Communication Interfaces	Onboard PWR-CAN and PWR-485 interfaces	• Operating Temperature	0 ~ 40°C

StamPLC is an IoT programmable logic controller designed for industrial automation and remote monitoring. The product is based on the StampS3A control module, which not only delivers powerful processing capabilities but also provides efficient wireless connectivity. In terms of control, StamPLC offers 8 opto-isolated digital inputs and 4 relay outputs (supporting both AC and DC loads), along with a GPIO.EXT port and 2 Grove interfaces, making the integration of various sensors and actuators both simple and reliable.




AI Pyramid-Pro SKU: AI-003-PRO

Main Controller


• SoC	Axera AX8850	• USB-A Ports	4× USB-A 3.0 (3× external + 1× internal onboard)
• CPU	Octa-core Cortex-A55 @ 1.7 GHz	• USB Type-C Ports	1× USB Host + 1× USB PD 3.0 100W, DC 9V/12V/20V compatible
• NPU	24 TOPS @ INT8	• Multimedia Interface	2× HDMI 2.0 digital A/V ports (1× output + 1× input), 4K@60fps supported
• Video Encoder	8K @ 30 fps H.264/H.265 encoding, scaling & cropping supported	• Cooling	Turbo cooling fan with EC intelligent thermal control
• Video Decoder	8K @ 30 fps H.264/H.265 decoding, 16-channel 1080p parallel decoding, scaling & cropping supported	• Audio Codec	ES8311 audio codec
• Memory	8GB 64-bit LPDDR4x, 4266 Mbps (4+4)	• Microphone	ES7210 microphone array input
• Storage	32GB eMMC 5.1	• Speaker	AWB737A amplifier, 4Ω 2W 2040 enclosed speaker
• Ethernet	2× Gigabit Ethernet ports	• RGB LED	48× RGB LEDs

AI Pyramid-Pro is a pyramid-shaped high-performance AI PC purpose-built for local AI inference and edge intelligence deployments. Powered by the Axera AX8850 SoC, it integrates an octa-core Cortex-A55 processor and a 24 TOPS @ INT8 NPU to effortlessly handle complex workloads including visual recognition, multimodal interaction, and on-device large language model inference. AI Pyramid-Pro features 8GB LPDDR4x high-bandwidth memory paired with a dedicated hardware video processing engine, supporting 8K H.264/H.265 encode/decode and 16-channel 1080p parallel decoding to satisfy AI vision analytics, video processing, and multi-stream media application demands.







High Performance



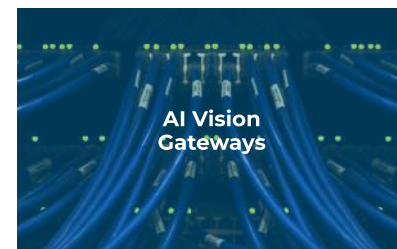
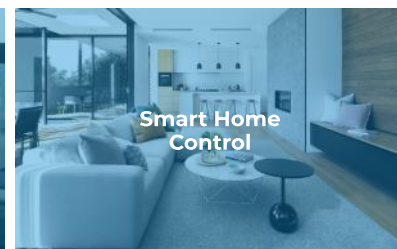
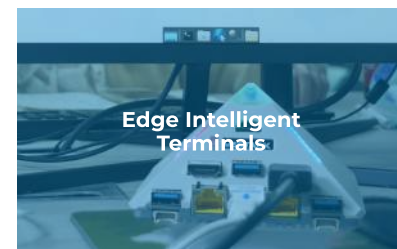
Rich I/O Interface Suite



Audio Subsystem



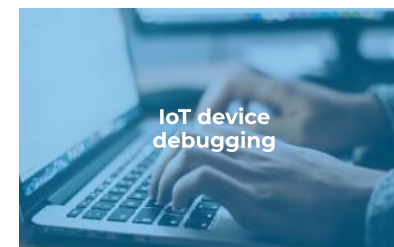
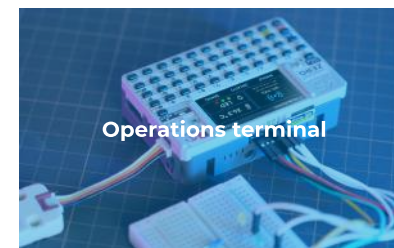
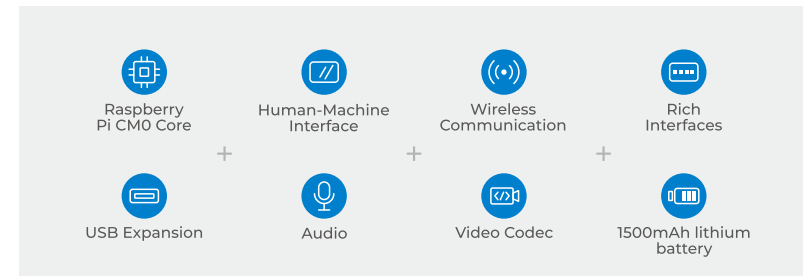
Hardware Video Engine



CardputerZero

• Core	Raspberry Pi Compute Module 0 (Cm0)	• Audio Codec	ES8389
• CPU	RP3A0 (BCM2837), Quad-Core Cortex-A53 @ 1 GHz, ARMv8-A (aarch64)	• Speaker	AW8737A speaker amplifier + 1W @ 8Ω speaker
• RAM	512 MB LPDDR2	• Microphone	MEMS microphone, SNR: 65 dB
• Wi-Fi	2.4 GHz Wi-Fi 802.11 b/g/n	• IMU	BMI270
• Ethernet	10/100M Ethernet, SR9900A USB 2.0 to Ethernet chip	• Battery Capacity	1500mAh
• Display	1.9" LCD @ ST7789v3, resolution 170x320	• Operating Temp.	0 ~ 40°C
• Camera	IMX219 CSI 4-Lane 8MP (3280 x 2464)	• Wi-Fi Operating Current	DC4.2V@132.3mA
• Keyboard	46-key matrix keyboard	• BLE Operating Current	DC4.2V@154.6mA

CardputerZero is a pocket-sized Linux personal computer designed for makers and developers, built on the Raspberry Pi CM0 platform. It integrates a quad-core Cortex-A53 processor, a 1.9-inch display, a 46-key matrix keyboard, an 8MP camera, an IMU, and an RTC, delivering a near-complete development terminal experience in a handheld form factor. It also features Wi-Fi, Bluetooth, Ethernet, microSD, a switchable Host/Slave USB architecture, and modular expansion capabilities via I2C/UART/SPI/GPIO. Combined with audio/video codec support and a battery-powered design, it enables an all-in-one solution for on-the-go development, edge data collection, and multimedia interaction.



Cardputer-Adv


SKU: K132-ADV

Main Controller


• SoC	ESP32-S3FN8 @ Dual-core Xtensa LX7, up to 240MHz	• Audio Codec	ES8311
• Flash	8MB	• Speaker	NS4150B amplifier + 8Ω@1W speaker
• External Storage	microSD	• Microphone	MEMS microphone, SNR: 65 dB
• Display	ST7789V2@1.14", 240 x 135px	• IMU	BMI270
• Keyboard	56 keys (4 x 14)	• Battery Capacity	1750mAh
• Key Actuation	160gf	• Operating Temp.	0 ~ 40°C
• Expansion Ports	HY2.0-4P + EXT 2.54-14P	• Wi-Fi Operating Current	DC4.2V@132.3mA
• IR	1x IR emitter	• BLE Operating Current	DC4.2V@154.6mA

Cardputer-Adv is a programmable card-sized computer powered by the Stamp-S3A core module (based on ESP32-S3FN8). It integrates a 1.14" LCD display and a 56-key minimalist keyboard for convenient interaction and input operations. In terms of audio, it features an ES8311 audio codec, a high SNR MEMS microphone, an NS4150B amplifier, and a 1W speaker, providing high-quality audio input and output capabilities. Additionally, it has a 3.5mm audio output jack for connecting external headphones or speakers.







StampS3A
Microcontroller



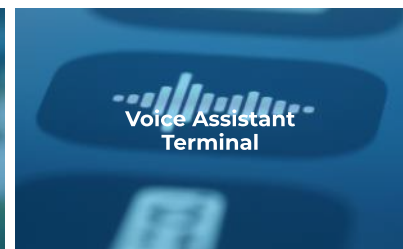
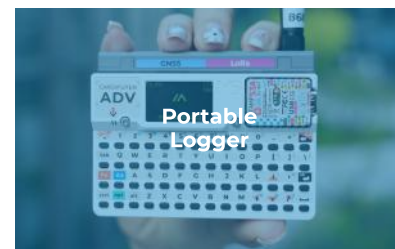
Isolated IO
Ports



CAN / RS485



Built-in
Sensors

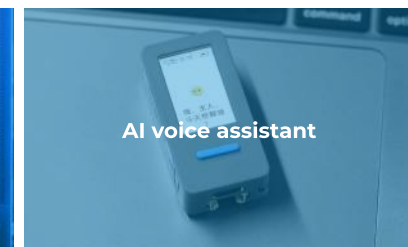
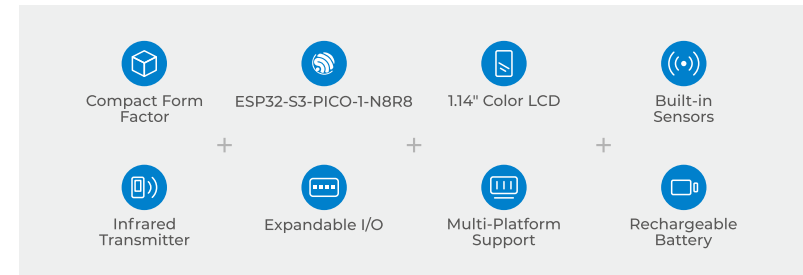


StickS3

SKU: K150

• SoC	ESP32-S3-PICO-1-N8R8 @ Dual-core Xtensa LX7 processor, up to 240MHz	• Microphone	MEMS microphone, Signal-to-Noise Ratio (SNR): 65 dB
• Flash	8MB	• Speaker	Aw8737 power amplifier + 8Ω@1W 2011 cavity speaker
• PSRAM	8MB Octal	• Operating Temperature	0 ~ 40°C
• IMU	BMI270	• Battery Capacity	250mAh
• Wi-Fi	2.4 GHz Wi-Fi	• Grove Load Capacity	No load: 5V, Max: 4.88V@0.38A
• Display	Model: ST7789P3, Resolution: 135x240		
• Input Power	USB Type-C DC 5V		
• Audio Codec	ES8311: 24-bit resolution, I2S protocol		

StickS3 is a compact and high-performance programmable controller designed for remote control and IoT applications. It is powered by the ESP32-S3-PICO-1-N8R8 main control chip, supporting 2.4 GHz Wi-Fi wireless communication, with built-in 8MB Flash and 8MB PSRAM to meet diverse application development needs, delivering excellent performance and scalability.



Main Controller

Controllers-Core



CoreS3
SKU: K138
Third-generation main controller of the M5Stack development-kit series.



Core2 v1.3
SKU: K010-V13
A highly integrated controller designed for IoT applications. It features the ESP32-D0WDQ6-V3 core with an Xtensa dual-core 32-bit LX6 processor running at 240 MHz.



Core2 For AWS v1.3
SKU: K010-AWS-V13
A development kit designed for AWS IoT learning and security projects.



CoreS3-SE
SKU: K128-SE
A lightweight version of the third-generation CoreS3 host in the M5Stack development kit series.



CoreMP135
SKU: K135
An integrated Linux industrial control host based on the STM32MP135DAE7 chip.



CM4Stack
SKU: K127/K127-US/K127-EU
An all-in-one micro host based on the Raspberry Pi CM4 core board.



Basic v2.7
SKU: K001-V27
A cost-effective IoT entry-level main controller. It uses the Espressif ESP32 chip.



Tough
SKU: K034
An industrial-grade programmable embedded controller. It uses the Espressif ESP32 as the main control chip.



PowerHub
SKU: C148/K148
PowerHub is a programmable controller integrating multi-channel power management.



Fire v2.7
SKU: K007-V27
A cost-effective Wi-Fi IoT controller. It uses the Espressif ESP32 main control chip.



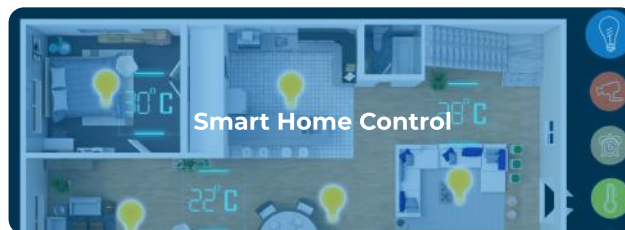
M5GO IoT Kit v2.7
SKU: K006-V27
A cost-effective IoT starter kit. The kit includes the M5GO core controller + 6 expansion units with different functions.



CoreS3 Thread BR
SKU: K149
CoreS3 Thread BR is a Thread Border Router kit. The core components consist of the CoreS3 controller and the Module Gateway H2 wireless module.



Industrial Automation



Smart Home Control



IoT Prototyping & Education

Controllers-Stick



StickC-Plus SE

SKU: K016-P-SE

The iterative version of StickC-Plus. It is powered by the ESP32-PICO-V3-02 chip.



StickC-Plus

SKU: K016-P

The large-screen version of the M5StickC. Its main controller uses the ESP32-PICO-D4 module.



StickT2

SKU: K016-T2

A compact and exquisite infrared thermal imager. It adopts the latest FLIR Lepton 3.0 long-wave infrared (LWIR) camera core.

Controllers-Atom



Atom-Lite

SKU: C008

A very compact development board in the M5Stack development kit series.



Atom-Matrix v1.1

SKU: C008-B-V11

This product replaces the MPU6886 from the previous generation with a BMI270 six-axis IMU sensor.



AtomS3R

SKU: C126

A highly integrated IoT programmable controller based on the ESP32-S3 main control.



Atom VoiceS3R

SKU: C126-ECHO

A programmable IoT voice interaction controller designed for intelligent voice control and human-computer interaction scenarios.



Atom Voice

SKU: C008-C

A programmable smart speaker based on the ATOM design, with a very compact size of only 24 x 24 x 17mm.



AtomS3-Lite

SKU: C124

A programmable controller from the Atom series in the M5Stack development kit series.



AtomS3U

SKU: K125

A USB flash drive-shaped multifunctional development board featuring the ESP32-S3 chip from Espressif.



AtomS3R-CAM

SKU: C126-CAM

A mini IoT programmable controller integrated with a camera, featuring the ESP32-S3-PICO-1-N8R8 main controller.



AtomS3R-M12

SKU: C126-M12

An IoT programmable controller integrated with an M12 camera.



AtomS3R-AI Chatbot

SKU: K147

AtomS3R-AI Chatbot is an AI voice development kit consisting of two core parts: a controller and a voice base.



AtomS3R-CAM AI Chatbot

SKU: K147-CAM

AtomS3R-CAM AI Chatbot is an AI vision and voice development kit. The kit consists of two core parts: the controller and the voice base.

Controllers-Stamp



Cardputer Mesh Kit
 SKU: K152
 A portable communication terminal kit that integrates LoRa Mesh networking with global positioning capabilities.



Stamp-P4
 SKU: S013
 A high-performance embedded module based on the ESP32-P4NRW32 chip.



Stamp-S3Bat
 SKU: S015
 An embedded core module with integrated power management. It uses the ESP32-S3-PICO-1-N8R8 as the main control core.



Dial v1.1
 SKU: K130-V11
 A high-performance, multifunctional embedded development board that has been fully upgraded from the original Dial product.



Capsule v11
 SKU: K129-V11
 A multifunctional embedded development platform using StampS3 as the core controller.



Air Quality
 SKU: K131
 An integrated low-power air quality monitoring device.



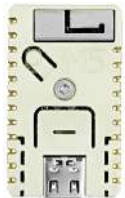
DinMeter
 SKU: K134
 An embedded development board that adheres to the 1/32 DIN standard.



VAMeter v11
 SKU: K136-V11
 A professional programmable high-precision power meter, primarily used for high-accuracy voltage and current measurements.



Stamp-Pico
 SKU: C050-B
 A plug-and-play, cost-effective Wi-Fi minimal core board.



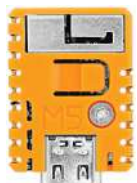
Stamp-C3U
 SKU: C122-B
 A cost-effective RISC-V minimal core board. It uses the Espressif ESP32-C3 as the main control chip.



Stamp-C3
 SKU: C056-B
 A cost-effective RISC-V minimal core board. It uses the Espressif ESP32-C3 as the main control chip.



Stamp-S3A
 SKU: S007-V033
 A highly-integrated embedded module based on the Espressif ESP32-S3FN8.



Stamp-S3 PIN2.54
 SKU: S007-PIN254
 A highly integrated embedded main control core module. It uses the Espressif ESP32-S3FN8 main control chip.



Stamp-S3 PIN1.27
 SKU: S007-PIN127
 A highly integrated embedded main control core module. It uses the Espressif ESP32-S3FN8 main control chip.



Stamp C6LoRa
 SKU: S012
 A high-performance programmable LoRa module designed for the 850 ~ 960 MHz frequency band.

Controllers-E-Paper



Xiaozhi Card Kit

SKU: K146

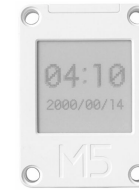
An ESP32-S3-based smart voice terminal. It supports 4G and Wi-Fi connectivity and is equipped with a 2.7-inch capacitive e-ink touchscreen, microphone, and speaker.



Paper v1.1

SKU: K049-B

A touch-enabled e-ink screen main control device launched by M5Stack, featuring the ESP32-D0WDQ6-V3 controller.



CoreInk

SKU: K048

A main control device with an E-Ink display launched by M5Stack, using the ESP32-PICO-D4 controller.

Controllers-Others



Arduino Nesso N1

SKU: DK001

A high-performance all-in-one development board jointly developed by M5Stack and Arduino, designed for remote monitoring and automation control.



Station-Bat

SKU: K124-B

A versatile industrial-grade programmable embedded controller. It uses the Espressif ESP32 as the main control chip.



Station-485

SKU: K123

A versatile industrial-grade programmable embedded controller. It uses the Espressif ESP32 as the main control chip.



NanoC6

SKU: C125

A compact, low-power IoT development board in the M5Stack development kit series.



NanoH2

SKU: C149

An ultra-compact IoT development board in the M5Stack development kit series. It is powered by the ESP32-H2FH4S as the SoC and features hardware security mechanisms such as secure boot and Flash encryption.



Industrial Automation



Smart Home Control



IoT Prototyping & Education

AI Hardware



AI Pyramid

SKU: AI-003

AI Pyramid is a pyramid-shaped high-performance AI PC designed for local AI inference and edge intelligence. Equipped with the Axera AX8850 SoC, an octa-core Cortex-A55 processor, 4GB LPDDR4x memory (2GB system + 2GB NPU/video), and a 24 TOPS @ INT8 NPU, it delivers reliable performance for visual recognition, multimodal interaction, and on-device large language model inference.



AI Pyramid-Pro

SKU: AI-003-PRO

AI Pyramid-Pro is a pyramid-shaped high-performance AI PC designed for local AI inference and edge intelligence. Equipped with the Axera AX8850 SoC, an octa-core Cortex-A55 processor, 8GB LPDDR4x memory (4GB system + 4GB NPU/video), and a 24 TOPS @ INT8 NPU, it delivers powerful performance for visual recognition, multimodal interaction, and on-device large language model inference.



LLM630 Compute Kit

SKU: K143

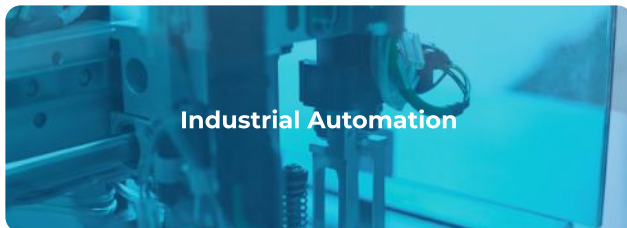
The LLM630 Compute Kit is an AI large language model inference development platform designed for edge computing and intelligent interaction applications. The kit's mainboard is equipped with the Axera AX630C SoC processor, integrating a high-efficiency NPU with 3.2 TOPs @ INT8 computing power, providing powerful AI inference capabilities to efficiently execute complex vision (CV) and large language model (LLM) tasks, meeting the needs of various intelligent application scenarios.



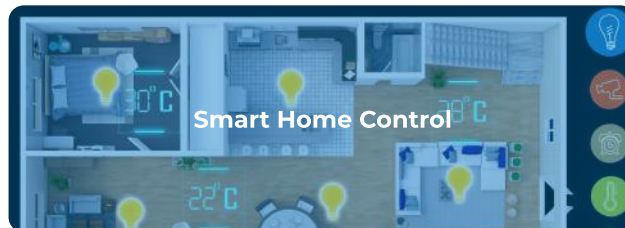
LLM-8850 Kit

SKU: AI-002-4G

LLM-8850 Kit is a high-performance AI accelerator kit designed for edge AI and embedded computing scenarios. It consists of the LLM-8850 Card AI accelerator and the LLM-8850 PiHat adapter board. The core LLM-8850 Card is based on the Axera AX8850 SoC and adopts the M.2 M-Key 2242 form factor, delivering up to 24 TOPS @ INT8 of computing power in a compact size. It efficiently accelerates multimodal large-model inference and video analytics workloads.



Industrial Automation



Smart Home Control



IoT Prototyping & Education

Expandable Functional Modules

Communication | I/O | Driver | Power

Module

Designed to enhance the capabilities of your main controller, our functional modules offer plug-and-play expansion for communication, power management, storage, display, motor control, and more. Build smarter, more complex systems with stackable or connectable modules that seamlessly integrate with the M5Stack ecosystem.

Features



Seamless Integration

All modules are designed for plug-and-play compatibility with M5Stack main controllers, ensuring quick setup and stable communication.



Versatile Functions

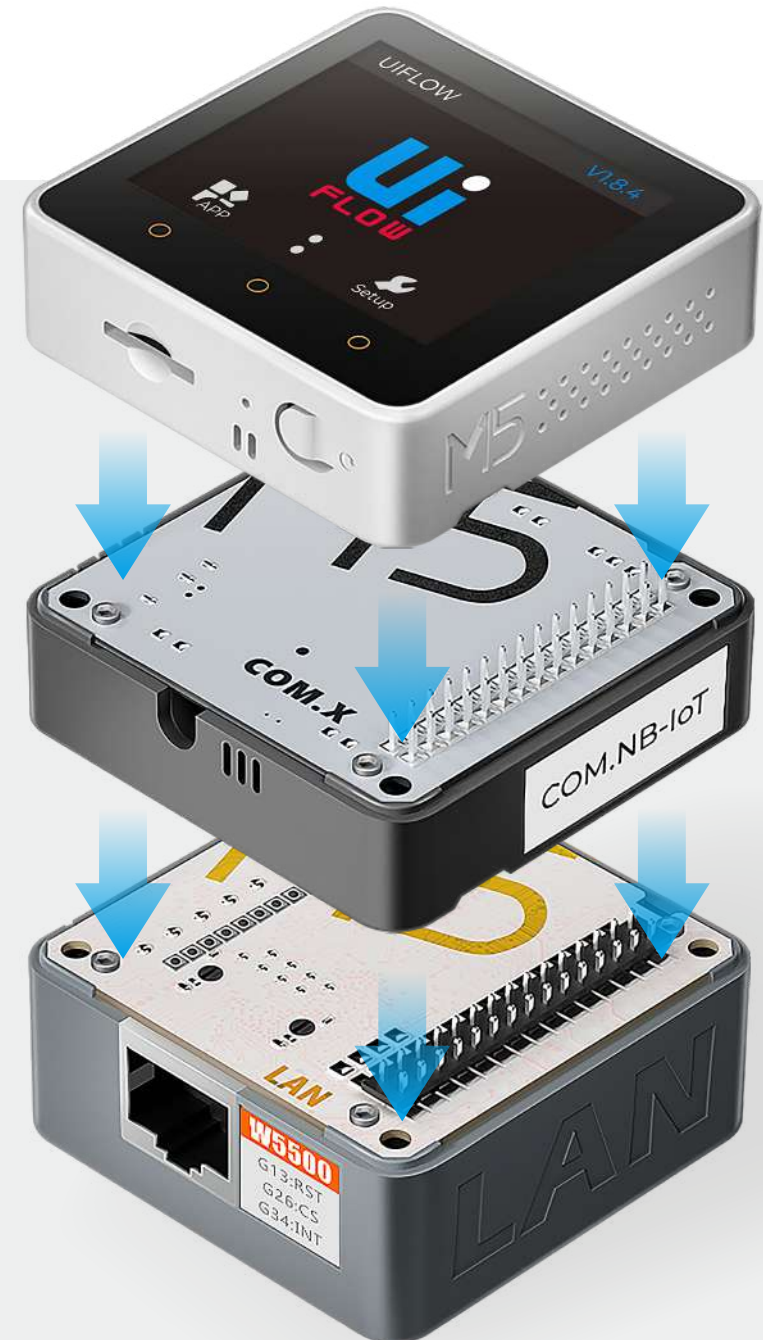
From motor drivers to GPS, LoRa, NB-IoT, relays, and battery management—expand your device's capabilities to fit any application.



Modular & Stackable Design

Standardized form factors and stacking interfaces allow flexible hardware combinations without the need for soldering or complex wiring.

60+ Stack modules for versatile expansion



Designed for easy stacking, these modules expand your M5Stack system with audio, GPS, motor control, battery management, communication buses, and more. Simply stack to customize your setup—no soldering needed.



Audio
SKU: M144



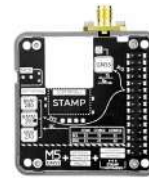
GPS v2.1
SKU: M003-V2



Gateway H2
SKU: M141



COMMU
SKU: M011



GNSS
SKU: M135



ASR
SKU: M147



LoRa433 v1.1
SKU: M005-V11



Fan v1.1
SKU: M013-V11



4EncoderMotor
SKU: M138



4EncoderMotor v1.1
SKU: M138-V11



Battery
SKU: M002



LLM
SKU: M140



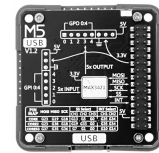
ExtPort For Core2
SKU: M123



LLM Kit
SKU: K144



Proto
SKU: M001



USB v1.2
SKU: M020-V12



BUS
SKU: M024



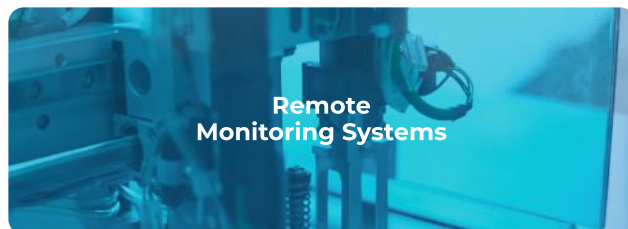
HMI
SKU: M129



LoRaWAN-EU868
SKU: M148



CC1101
SKU: M146



Stack-Module 13.2 offers advanced connectivity and control with Zigbee, LoRaWAN, LTE, and CAN power modules. It also includes motor drivers, relays, servo controls, displays, and precise measurement modules — all designed for easy stacking and seamless integration.



COM.X Zigbee
SKU: M031-Z



COM.X LoRaWAN470
SKU: M031-C2



COM.X LTE
SKU: M031-A



COM.X NB IoT
SKU: M031-B



COM.X NB IoT-CN
SKU: M031-B2



COM.X Cat1
SKU: M031-H



LAN 13.2
SKU: M136



PwrCAN 13.2
SKU: M139



GRBL 13.2
SKU: M035



13.2 BLDC Driver
SKU: M036/M036-B



Servo2 13.2
SKU: M014-B



4In8Out 13.2
SKU: M122



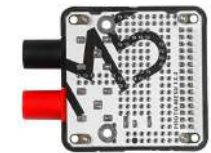
2Relay 13.2
SKU: M124



Stepmotor Driver v1.1
SKU: M039-V11



4Relay v1.1
SKU: M121-V11



Proto-Meas
SKU: M033



RCA 13.2
SKU: M125



Display 13.2
SKU: M126



RS232F 13.2
SKU: M130



RS232M 13.2
SKU: M131



PPS 13.2
SKU: M137



ECG 13.2
SKU: M034



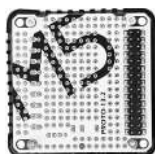
Dual Kmeter
SKU: M127



AIN4-20mA
SKU: M133



QRCode 13.2
SKU: M145



Proto 13.2
SKU: M032



GoPlus2 13.2
SKU: M025-B



Battery 13.2
SKU: M120

Stack-Base offers versatile base units and power solutions, including IoT connectivity, PoE, LAN, battery bases, chargers, and specialized modules for industrial and environmental applications—providing a solid foundation for your M5Stack system.



IoT Base CatM
SKU: M119



Thermal Online
SKU: K119



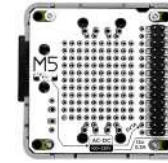
PoE v1.2
SKU: K012-C-V12



LAN v1.2
SKU: M031-B



PM2.5
SKU: M134



AC Power
SKU: K116



M5GO Bottom
SKU: A014



M5GO Bottom2
SKU: A014-C



Base AAA
SKU: A122



M5GO Charger
SKU: A016



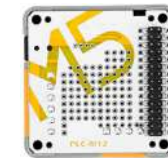
Base X
SKU: K037



Base26 v1.1
SKU: K026-B



Base15 v1.1
SKU: K025-B



PLC-M12 v1.1
SKU: K011-B-V11



Base DIN
SKU: M132



M5GO Bottom3
SKU: A014-D



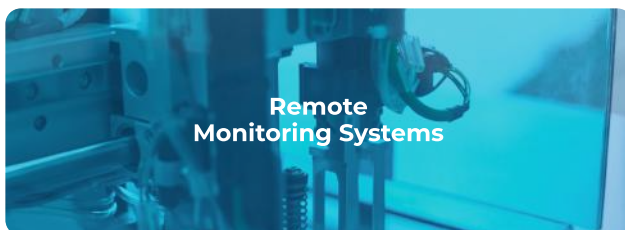
Bottom v1.1
SKU: C001-C2



Base DMX
SKU: M128



Air Quality
SKU: M134



**Remote
Monitoring Systems**



**IoT Device
Development**



**Industrial
Automation**

For Atom

Compact, purpose-built modules instantly expand functionality—communication, sensing, power management, motion control. Just stack or snap them in, power up, and start coding. No soldering, no hassle.

Features



Small Form Factor



Low Power Consumption

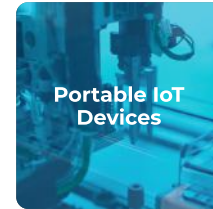


Easy Stack/Connect Interface

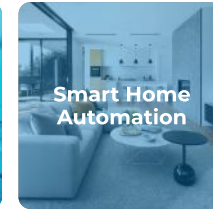


Versatile Functions

Applications



Portable IoT Devices

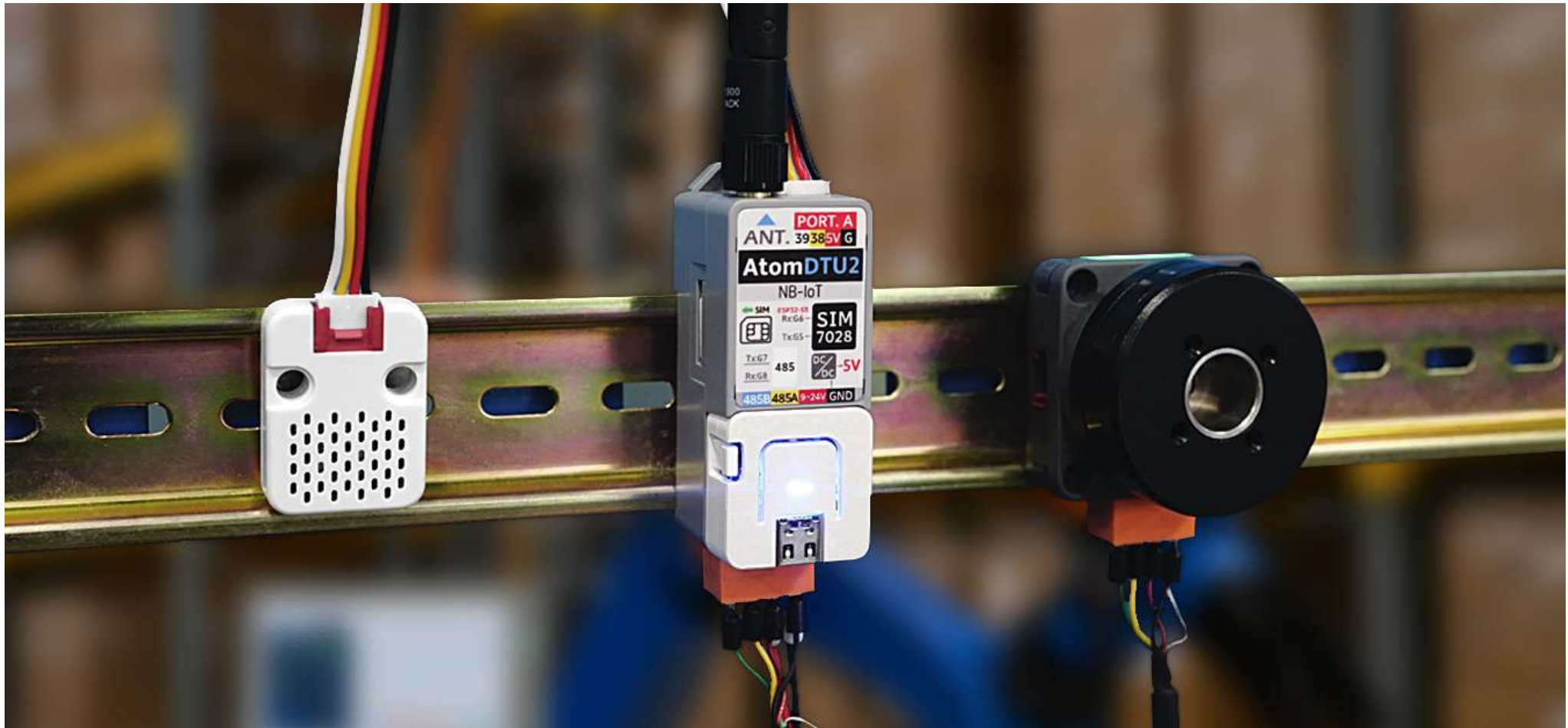


Smart Home Automation



Compact Robotics Control

Functional Modules



For Atom-Atom Kit



Switch
SKU: K042



Switch-D
SKU: K042-D



Socket
SKU: K055



Socket-CN
SKU: K055-CN



JoyStick v11
SKU: K137-V11



Display
SKU: K115



TFCard
SKU: K044

For Atom-Atom DTU



NBloT2 v1.1
SKU: A106-V21



NBloT2
SKU: K059-B



LoRaWAN-CN470
SKU: A152-CN470



LoRaWAN-EU868
SKU: A152-EU868



LoRaWAN-US915
SKU: A152-US915

For Atom-Atom Tail



Tail Bat
SKU: T001



Tail RS485
SKU: T002

For Atom-Atomic Base



Voice Pyramid
SKU: A167



Audio-3.5
SKU: A166



Atomic
SKU: A077



Hub Proto
SKU: K039



Atom HAT
SKU: A086



PortABC
SKU: A130



QRCode2 Base
SKU: A133-B



RS485
SKU: A131



RS232 Base
SKU: A136



SPK Base
SKU: A098



Battery Base
SKU: A151



Voice Base
SKU: A149



PWM Base
SKU: A114



PoE Base
SKU: A091



CAN Base
SKU: A103



HDriver Base
SKU: A092



Motion Base v1.1
SKU: A090-V11



Display Base
SKU: A115



GPS Base V2.0
SKU: A134-V2



Stepmotor Base
SKU: A132

For Stamp

Designed for Stamp series, these compact modules enable flexible expansion of sensing, communication, power, and control functions with a simple plug-and-play design.

Features



Compact and Lightweight

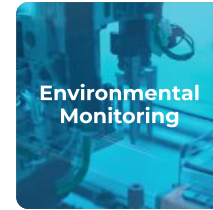


Low Power Consumption

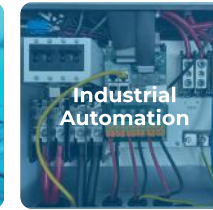


Easy to Connect and Stack

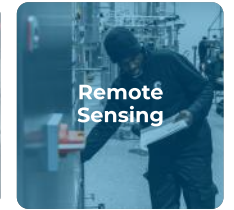
Applications



Environmental Monitoring



Industrial Automation



Remote Sensing

Functional Modules

For Stamp-Wireless

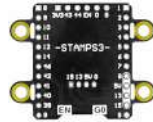
For Stamp-Others



Stamp CatM
SKU: S003



Stamp Cat1
SKU: S004



Stamp-S3 BreakOut
SKU: A129



Stamp IO
SKU: S002



PWR485
SKU: S001



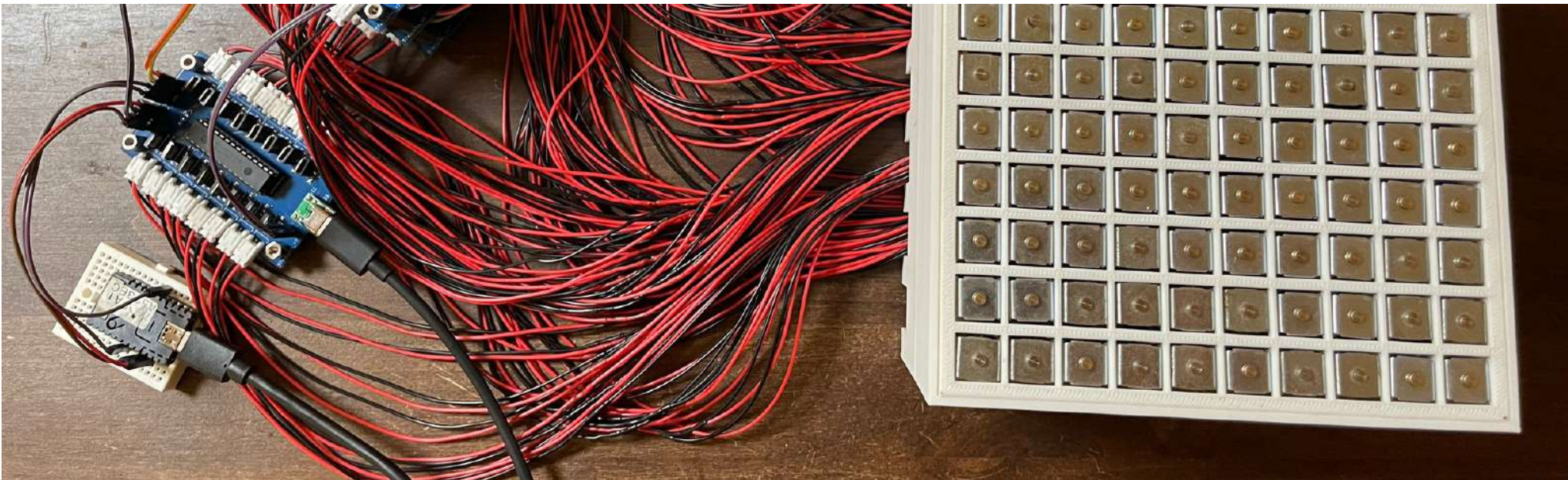
Stamp ISP
SKU: S006



Timer Power
SKU: S005



GroveBreakOut
SKU: A144



For Cardputer-Adv

Cap LoRa-1262 is a high-performance communication expansion module that integrates LoRa communication and GNSS global positioning and navigation, designed for use with Cardputer-Adv.

Features



Compact and Lightweight



Low Power Consumption

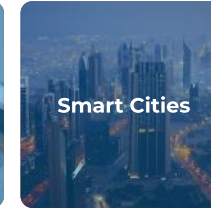


Easy to Connect and Stack

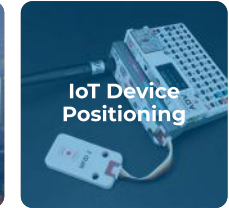
Applications



Smart Homes



Smart Cities



IoT Device Positioning

For Cardputer-Adv-Wireless



Cap LoRa-1262
SKU: U214



For StamPLC

Designed for StampPLC series, these compact modules enable flexible expansion of sensing, communication, power, and control functions with a simple plug-and-play design.

Features



Compact and Lightweight

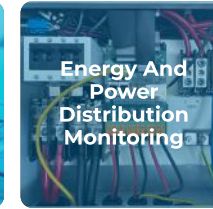
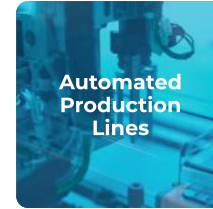


Low Power Consumption



Easy to Connect and Stack

Applications



Functional Modules

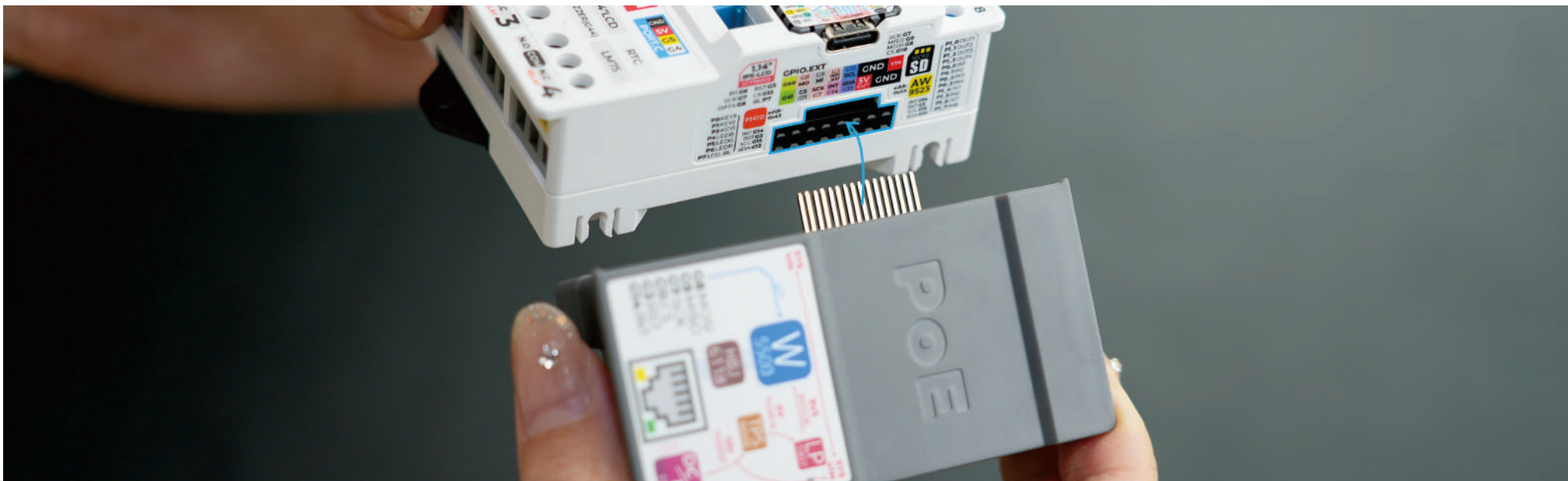
For StamPLC-Expansion Module



StamPLC PoE
SKU: A165



StamPLC AC
SKU: A160



For Chain

Designed for chain series, these compact modules enable flexible expansion of sensing, communication, power, and control functions with a simple plug-and-play design.

Features



Compact and Lightweight



Low Power Consumption

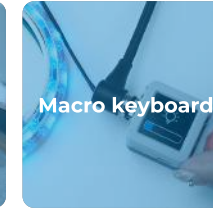


Easy to Connect and Stack

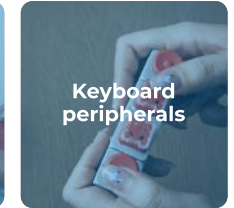
Applications



Smart Homes



Macro keyboard



Keyboard peripherals

For Chain-HMI



Chain DualKey
SKU: C147



Chain Angle
SKU: U208



Chain Encoder
SKU: U207



Chain Key
SKU: U206



Chain Joystick
SKU: U205

For Chain-Connector



Chain Blank
SKU: U210



Chain Mount
SKU: U211



Chain Return
SKU: A154



Chain Bridge
SKU: A155

For Chain-Sensor



Chain ToF
SKU: U209



IoT Devices

An IoT single-live wire switch controller. It integrates the ESP32-C6-MINI-1 core controller and a magnetic latching relay, supports connecting to electrical load circuits of AC 100 ~ 230V, and helps quickly build IoT smart homes.

Features



Compact and Lightweight

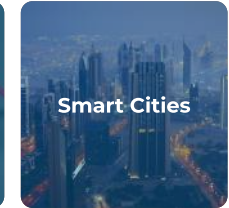
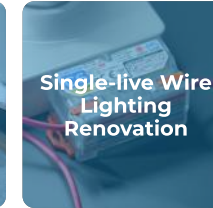


Low Power Consumption



Easy to Connect and Stack

Applications

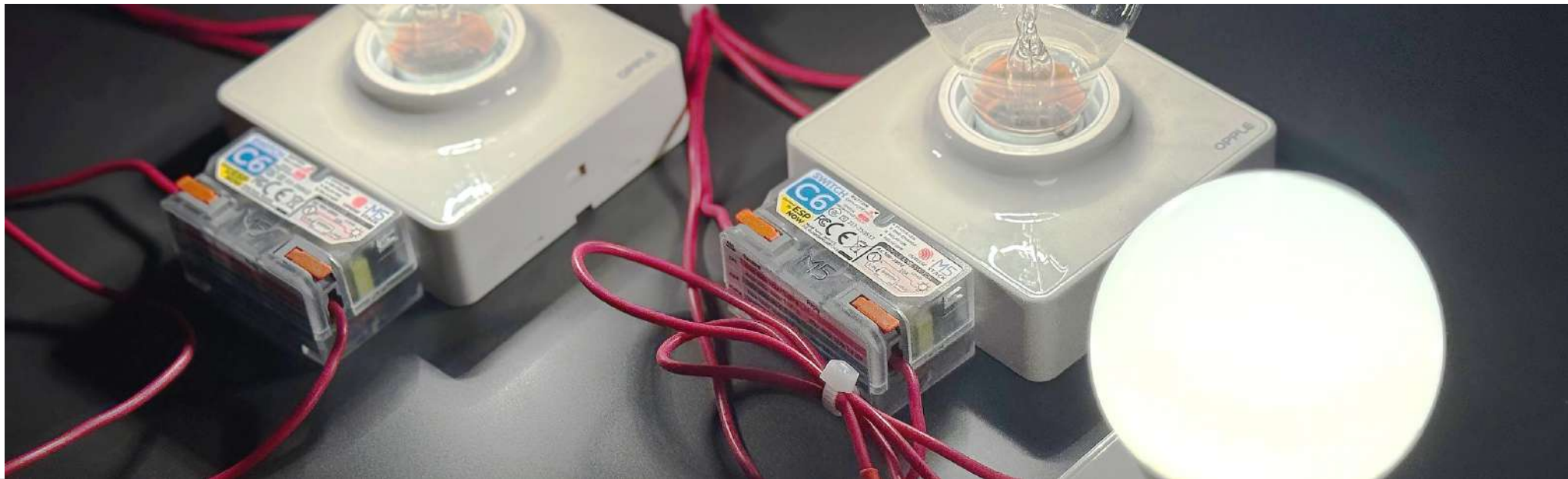


Functional Modules

IoT Devices-Smart Home



SwitchC6
SKU: K140



A large, semi-transparent blue number '3' is positioned on the left side of the slide, serving as a background element.

Sensors & Actuators

Environmental | Motion | Light

UNIT

A wide range of sensors and actuators designed to bring rich sensing, control, and connectivity to your projects. Seamlessly integrate environmental, motion, audio, wireless, and industrial-grade modules for versatile IoT and embedded solutions.

Features



Wide Sensor & Actuator Range



Industrial & Durable



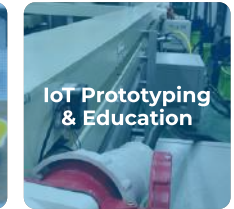
Wireless & Wired



Stackable & Easy Integration

170+ units to streamline development and drive innovation.

Applications



I2C



UART



GPIO



ELSE

Unit-Sensor



Gateway H2
SKU: U195



ASR
SKU: U194



Ultrasonic-I2C
SKU: U098-B1



ToF
SKU: U010



Ultrasonic-IO
SKU: U098-B2



Limit
SKU: U145



PIR
SKU: U004



OP90
SKU: U057



OP180
SKU: U058



Weight
SKU: U030



Scales
SKU: U108



Gesture
SKU: U127



Color
SKU: U009



Thermal
SKU: U016



Light
SKU: U021



Dlight
SKU: U136



Ameter
SKU: U086



Vmeter
SKU: U087



NCIR
SKU: U028



Heart
SKU: U029



Finger
SKU: U008



Mini IMU
SKU: U095



Accel
SKU: U056



Thermal2
SKU: U149



NCIR2
SKU: U150



ENV-Pro
SKU: U169



CO2L
SKU: U104



UWB
SKU: U100



Earth
SKU: U019



Tube Pressure
SKU: U130



Hall
SKU: U084



MIC
SKU: U096



Mini PDM
SKU: U089



Mini Scales
SKU: U177



Weight-I2C
SKU: U180



Mini BPS v1.1
SKU: U090-B



DAC2
SKU: U012-B



KMeter-ISO
SKU: U133-V11



AIN4-20mA
SKU: U162



AC Measure
SKU: U164



ToF4M
SKU: U172



Grove to Grove
SKU: U148



TMOS PIR
SKU: U185



Reflective IR
SKU: U175



ExtEncoder
SKU: U161



Fingerprint2
SKU: U203



MQ
SKU: U199



INA226-10A
SKU: U200



INA226-1A
SKU: U200-1A

Unit-Actuator



Buzzer
SKU: U132



Vibrator
SKU: U059



Fan
SKU: U063



FlashLight
SKU: U152



Roller485
SKU: U182



Roller485-Lite
SKU: U182-Lite



RollerCAN
SKU: U188



RollerCAN-Lite
SKU: U188-Lite



4Relay
SKU: U097



2Relay
SKU: U131



Relay
SKU: U023



SSR
SKU: U122



ACSSR
SKU: U139



DDS
SKU: U105



DCSSR
SKU: U140



IR
SKU: U002



RF433T
SKU: U114



RF433R
SKU: U113



Laser RX
SKU: U065



Laser TX
SKU: U066

Unit-Extension



ChainBus
SKU: U212



Mini CAN
SKU: U179



EXT.IO2
SKU: U011-B



Hub
SKU: U006



PaHub v2.1
SKU: U040-B-V21



3.96
SKU: U020



TypeC to Grove
SKU: U151



RS485
SKU: U034



RS485-ISO
SKU: U094



CAN
SKU: U085



DMX
SKU: U183

Unit-Driver



HBridge
SKU: U160



8Servos
SKU: U165



Hbridge v1.1
SKU: U160-V11



BLDC Driver
SKU: U181

Unit-Audio



Synth
SKU: U178



MIDI
SKU: U187



RCA
SKU: U155



AudioPlayer
SKU: U197

Unit-HMI



OLED
SKU: U119



LCD
SKU: U120



DigiClock
SKU: U146



Glass
SKU: U158



Mini OLED
SKU: U166



Glass2
SKU: U158-B



RGB
SKU: U003



RGB LED Strip
SKU: A093



RGB LED
SKU: A035



NeoHEX
SKU: A045-B



HEX
SKU: A045



Neco
SKU: U163



Scroll
SKU: U186



Joystick2
SKU: U024-V2



Puzzle
SKU: U193



Joystick v1.1
SKU: U024-C



Angle
SKU: U005



Encoder
SKU: U135



Fader
SKU: U123



Key
SKU: U144



Button
SKU: U027



Dual Button
SKU: U025



CardKB v1.1
SKU: U035-B



8Angle
SKU: U154



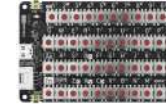
8Encoder
SKU: U153



ByteButton
SKU: U192



ByteSwitch
SKU: U191



CardKB2
SKU: U215



Step16
SKU: U198

Unit-Cameras



TimerCamera -X
SKU: U082-X



TimerCamera -F
SKU: U082-F



Camera-Battery
SKU: A068



CamS3-5MP
SKU: U174-B



UnitV2
SKU: U078-D



UnitV2-M12
SKU: U078-M12



UnitV2-USB
SKU: U078-USB



OV7740
SKU: U078-C



UnitV-M12
SKU: U078-V-M12



PoECAM-W v1.1
SKU: U121-B-V11

Unit-Wireless



LoRaWAN-CN470

SKU: U184-CN470



LoRaWAN-AS923

SKU: U184-AS923



LoRaWAN-EU868

SKU: U184-EU868



LoRaWAN-US915

SKU: U184-US915



CatM

SKU: U128



NB-IoT-CN

SKU: U112



NB-IoT2

SKU: U111-B



ZigBee

SKU: U110



CatM GNSS

SKU: U137



LoRaE220-920

SKU: U170



LoRaE220-433

SKU: U170-433



GPS v1.1

SKU: U032-V11



GPS SMA

SKU: U190



NFC

SKU: U216



UHF-RFID

SKU: U107



Cat1-CN

SKU: U204

Unit-Ethernet



PoE-P4

SKU: U213



PoESP32

SKU: U138

Unit-Others



ID

SKU: U124



Mini CAN

SKU: U179



QRCode

SKU: U173



TimerPWR

SKU: U189



Proto

SKU: U022



Mini Proto

SKU: U064



Power

SKU: U125



RTC

SKU: U126

HAT

Small, 8-pin stackable modules to quickly add sensors, actuators, audio, and control functions—ideal for compact and portable projects.

Features



Compact Size



8-Pin Stackable Design

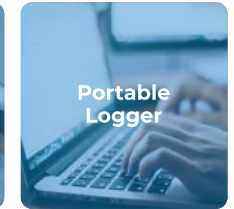
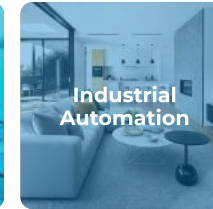
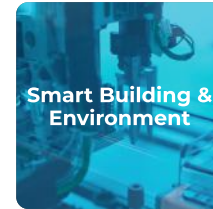


Easy Plug-and-Play Integration



Versatile Functionality

Applications



For Stick-Sensor



NCIR
SKU: U061



Heart
SKU: U118



PIR
SKU: U054



ToF
SKU: U072



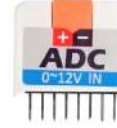
Dlight
SKU: U134



Thermal
SKU: U062



ENV-III
SKU: U053-D



ADC
SKU: U069



ADC v1.1
SKU: U069-V11



Finger
SKU: U074

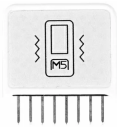


DAC2
SKU: U068-B

For Stick-Actuator



Servo
SKU: U075



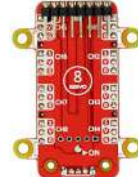
Vibrator
SKU: U159

For Stick-Extension



RS485
SKU: U067

For Stick-Driver



8Servos v1.1
SKU: U076-B



Cback Driver
SKU: A100

For Stick-Audio



SPK
SKU: U055



SPK2
SKU: U055-B

For Stick-HMI



Joystick
SKU: U073



JoyC
SKU: U079



Mini EncoderC
SKU: U157



Mini JoyC
SKU: U156

For Stick-Others



Proto
SKU: U060



T-Lite
SKU: K126



18650C
SKU: U080

A large, semi-transparent blue number '4' is positioned on the left side of the page, extending from the top to the bottom.

Hobby & Accessories

DIY Kits | Cables | Mounts

HOBBY

Explore creative robotics, drones, and audio devices designed for enthusiasts and makers. Build, experiment, and innovate with easy-to-use kits and modules.

Features



Robotics & Drone Kits

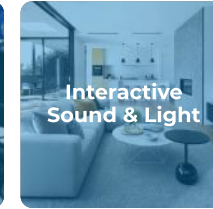


Easy Integration



Maker-Friendly

Applications



Hobby-Drone



Stamp-Fly
SKU: K138

Hobby-Robot



LidarBot
SKU: K017-C



Bala2-Fire
SKU: K014-E



BalaC-Plus
SKU: K038-B



RoverC-Pro
SKU: K036-B



BugC2
SKU: K033-C



StackChan
SKU: K151/K151-R



StackChan GoCarry Clip
SKU: A177

Hobby-Others



Printer
SKU: K118



Demo Board
SKU: K024-B



Scales Kit
SKU: K121



6060-Push
SKU: K028



**PM2.5 Air
Quality Kit-SHT30**
SKU: K023-B

Accessories-Display



Display 1.14 Inch
SKU: A174

Accessories-Cable



Grove Cable
SKU: A034



Grove Y Cable
SKU: A150



**Shielded
Twisted
Pair Cable**
SKU: A088



PoE Splitter
SKU: A139



**Magnetic
Type-C Cable**
SKU: A143



**PwrCAN
Cable**
SKU: A146

Accessories-Camera



CamModule SC850SL
SKU: A157

Accessories-Servo



Catch
SKU: U102



**Servo Kit
180°**
SKU: A076-B











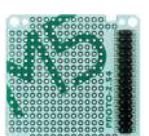


**Servo Kit
360°**
SKU: A076-C



SG90 Servo
SKU: A076

Accessories-Others

									
Guide Rail SKU: A111	SandwichC SKU: A123	Screw SKU: A050-B	Frame SKU: A013	KeyCap SKU: A153	Module Proto Panel Frame SKU: A119	Proto Case SKU: A124	Proto Case SKU: A124	ESP32 Downloader Kit SKU: A105	Capsule Proto SKU: A141
									
StickC-Plus Watch Kit SKU: K016-H	Watch Dev Kit v1.1 SKU: A128-B	Cardputer Accessory Kit SKU: A145-V033	Nut SKU: A037	CLIP-B SKU: A148-B	CLIP-A SKU: A148-A	Corner SKU: A036	Stamp Fly Accessory Kit SKU: A147	Connector SKU: A052	Proto Board SKU: A002

Accessories-Connector

								
Stick Watch Accessory Kit SKU: A173	Aluminium Extrusions SKU: A061/A062/A063/A064/A065	Grove to Dupont SKU: A096	Grove to 4P SKU: A099	HY2.0-4P SMD SKU: A118	Grove T SKU: U039-B	Grove to Grove SKU: A040	Grove to USB-C SKU: A140	Bus Socket DIP 13.2 SKU: A089

Accessories-Connector

					
BAVG to Socket SKU: A104	485T SKU: A071	1.27-Socket Kit for Stamp-S3 SKU: A138	Atomic ToUnit Base SKU: A161	Grove Converter SKU: A162	Atomic ToChain Base SKU: A163



Software Platform

UIFlow – Graphic Coding IDE

UIFlow 2.0

Graphic Coding IDE
Empowering IoT Innovation

UIFlow is a browser-based programming tool that simplifies coding with intuitive block-based logic. Each block serves a specific function to control the M5GO, making it easy for beginners to grasp programming concepts step by step. As you progress, you'll naturally transition to Python—a powerful yet beginner-friendly programming language that UIFlow is built upon.

Edit control

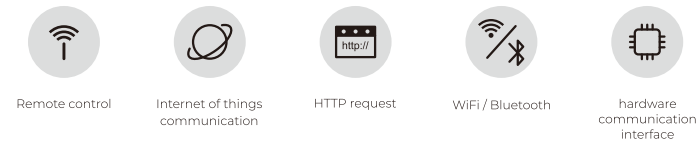
Programming basis



Logical progression



Advanced functions

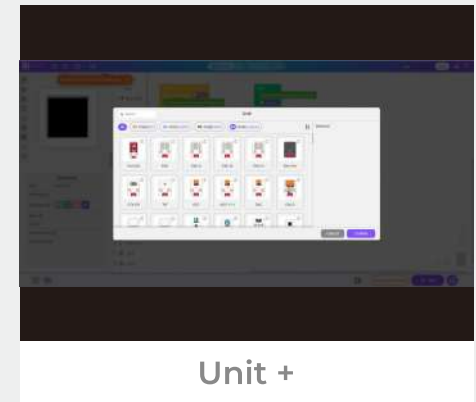
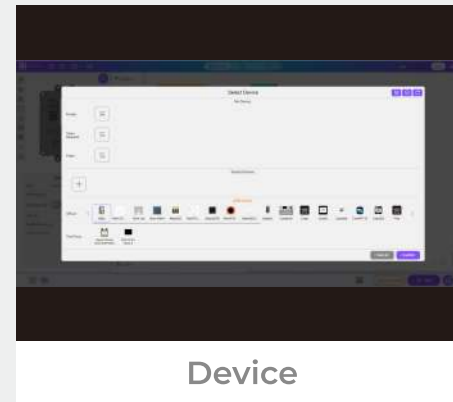
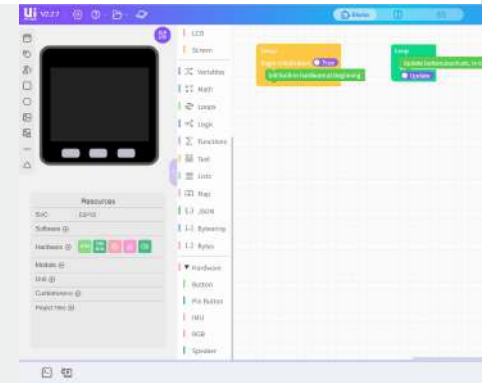


Enrich and expand

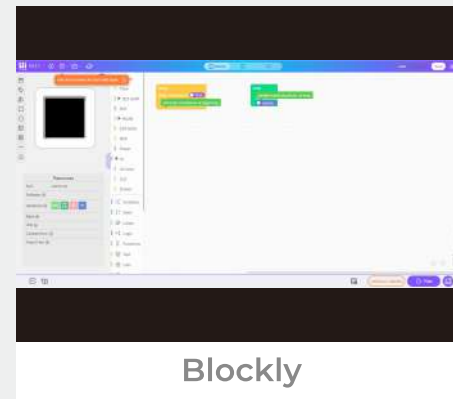


UIFlow Characteristic

- Seamlessly switch between blockly and Python.
- Use the remote feature to control the M5 from your smartphone.
- Design your projects UI with our intuitive UI designer.
- Develop IOT applications with ease.
- Program your M5 on any smart device.



Software Platform



Vibrant Community

Our vibrant community fuels innovation by sharing ideas, code, and projects, with access to 900+ firmware packages available in M5Burner, continuously pushing the boundaries of IoT and embedded systems.



Hackster

Share projects and connect with makers
<https://www.hackster.io/m5stack>



GitHub

Open-source code repositories
<https://github.com/m5stack>



Discord

Live chat with the community
<https://discord.gg/ysQAWBUE9Q>



X

Updates and news
<https://x.com/M5Stack>



LinkedIn

Build meaningful connections
<https://www.linkedin.com/company/m5stack>



Instagram

Updates and news
<https://www.instagram.com/m5stack>



YouTube

New releases and UIFlow demos
<https://www.youtube.com/m5stack>



Facebook

Updates and news
<https://www.facebook.com/M5Stack>



181,000+

in our global maker & developer community

36,000+

Open-source code repositories on GitHub

1600+

Firmware packages available in M5Burner

1000+

Community projects on Hackster



Marketing Activities

Software Platform



Industry Trade Shows

- CES
- Embedded World
- The Things Conference
- IOTE
- Espressif Summit
- YOLO Vision
- GOTC



Meet Up

- Munich, Germany
- Tokyo, Japan
- Osaka, Japan
- Fukuoka, Japan
- Hiroshima, Japan
- Hakodate, Japan
- Kanazawa, Japan
- Shenzhen, China



Maker Faire

- Bangkok
- Bay Area
- Kyoto
- Prague
- Rome
- Shenzhen
- Tokyo

Annual Online Contest



Pioneering Technological Advancement

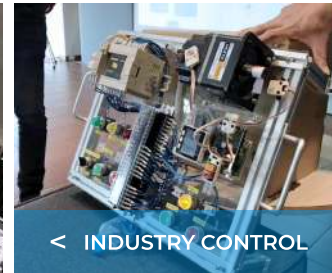
M5Stack provides versatile and scalable IoT solutions for various industries and commercial applications. Our platform enables clients to develop and deploy end-to-end solutions efficiently, reducing time-to-market and costs while maximizing innovation.



SMART RETAIL



LOW CODE



< INDUSTRY CONTROL



GAMING



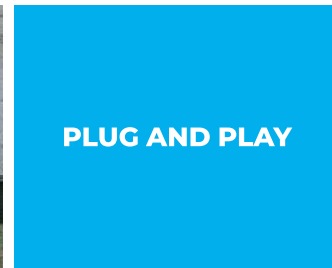
SMART CITY



SMART AGRICULTURE >



< SMART HOME >



PLUG AND PLAY



MIDI



SMART FACTORY >



CUSTOMIZATION



ROBOT >



CRYPTO

From Prototype to Mass Production

Modular. Certified. Scalable.

From rapid prototyping with off-the-shelf modules to fully customized industrial products, M5Stack empowers you to build, scale, and deploy smarter IoT solutions worldwide.

Why M5Stack ODM

Proven Ecosystem

Modular ESP32 platform with 400+ reusable modules.

Accelerated Customization

From reference design to production-ready hardware in 8-16 weeks.

Scalable Manufacturing

From pilot builds to stable mass production, backed by long-term supply commitment.

Collaboration Models

Standard Product Solutions

100 % off-the-shelf M5 controllers & modules
Zero NRE, fastest path from PoC to volume

Tailored Solutions

Start from a proven M5 reference design
Optimized for seamless production transition
Custom enclosure, PCB layout, and firmware adaptation

Collaborative Innovation

Co-design entirely new hardware platforms with our engineering team
Joint R&D and roadmap alignment for breakthrough projects

Fast & Cost-Effective → Deep Customization

Proven Co-Creation Cases

Co-Developed Products



Kantan Play



Arduino Nesso N1



Smart Retail Shelf Monitoring



Smart Factory Monitoring Controller



Smart Building Gateway

Industrial & Commercial Solutions

Build Fast, Stack Smart.

