

M5Stack ESP32 Core Ink Development Kit(1.54" eInk display)



Description

CoreInk is a brand new E-ink display in the M5Stack cores range. Controlled by the ESP32-PICO-D4 This new device includes a 200x200 1.54" Black and White E-Ink Display. Compared to a regular LCD , E-ink displays are easier on the eyes, which makes them a great choice for reading or viewing for longer periods. Other benefits are the low power consumption and the ability to retain the image even if power to the display is

terminated. For control the CoreInk integrates an multi-function button,A physical button, integrated status LED and buzzer.The device also includes a 390mAh Lipo , RTC(BM8563)for controlling accurate timing and deep sleep functionality. CoreInk features independent reset and power buttons , expansion ports(HY2.0-4P , M-BUS , HAT expansion)for attaching external sensors to expand functionailty , for unlimited possibilities.



Caution:

Do not expose the device in ultraviolet rays for a long time, or it may damage the screen.

Precautions: Please avoid long-time high-frequency refresh when using it. The recommended refresh interval is (15s/time). Do not expose to ultraviolet rays for a long time, otherwise it may cause irreversible damage to the ink screen. The low-power power management solution adopted by CoreInk is different from that of CORE and StickC devices. When in use, the PWR button is used as a power-on button(long press 2s). If you need to shut down the device, you need to use the software API or press the reset button on the back.



Product Features

- ESP32 Standard wireless functions WiFi,Bluetooth
- Internal 4M Flash
- Low Power Display
- 180 degree viewing angle
- Expansion ports
- Built-in Magnet
- Internal Battery
- Expandable

Includes

- 1x CoreInk
- 1x Type-C USB(20cm)

Application

- IoT Terminal
- E-Book
- Industrial Control Panel
- Electronic Tag

Specification

Resource	Parameter
ESP32-PICO-D4	240MHz dual core, 600 DMIPS, 520KB SRAM, Wi-Fi, dual mode Bluetooth
Flash	4MB Flash
Input Voltage	5V @ 500mA
Ports	TypeC*1, HY2.0-4P*1 , M-BUS Female Connector, Pin Array/ Hat Expansion
Screen	GDEW0154M09 SPI Port 200*200@1.54" Dpi:184 1-bit Black & White(Grayscale : 2) Viewing Area(mm) : 27.6x27.6 Dot pitch(mm) 0.138x0.138 Refresh Time (s) 0.82 /Partial refresh (s) 0.24
Physical Buttons	Programmable *1 , Reset *1, Power *1
LED	Green LED x 1
RTC	BM8563
Buzzer	Passive Buzzer*1
Wifi	2.4G 3D Antenna
PINS	G25, G26, G36, G23, G34, G18, G21, G22, G14, G13
Battery	390mAh@3.7V

Working Temp	32°F to 104°F (0°C to 40°C)
Net Weight	32g
Gross Weight	55g
Dimensions	56*40*16mm
Package Size	82*46*20mm
Case Material	Plastic (PC)
