

NEW



Features

- High-performance Octa-Core xA55 SoC processor, up to 2.0GHz
- Built-in Integrated ARM G57 MC01 GPU for High performance multimedia processing with low power consumption
- 4GB LPDDR4 Memory and 32GB eMMC onboard design
- Comprehensive connectivity: 1 Gigabit Ethernet and Wi-Fi6 +BT5.4 for option
- Flexible Media output for selection: HDMI, eDP, MIPI-DSI
- Rich I/O for usage: 11 x USBs, 5x Serial Ports, 1x 1W stereo Amp 4Ω, 1x 3.5mm Audio Jack
- Support USB Type-C PD, 9V/12V/15V
- Support Android 15, Linux-Debian, Ubuntu



Introduction

MBx3-A527 is a 3.5 inch cost-effective and streamlined embedded board powered by an Octa-core ARM Cortex-A55 processor up to 2.0GHz, equipped with 4GB LPDDR4 memory and 32GB eMMC storage. It supports Android 15 and Linux, delivering high efficiency with low power consumption to meet diverse embedded application needs.

The board features 11 USB ports (4x Type-A + 7x headers) and 5 Serial Ports, enabling seamless integration with peripherals such as barcode scanners, receipt printers, sensors, and control modules. With Type-C PD 9–15V power input and streamlined display outputs including MIPI DSI, HDMI, and eDP, it is well-suited for single-screen or basic dual-display solutions.

MBx3-A527 is purpose-built for budget-friendly industrial control, HMI panels, retail self-service terminals, and interactive information kiosks, where simplified display requirements and easy peripheral integration are essential. It offers reliable performance, simplified system design, and outstanding cost-effectiveness, making it an ideal choice for lightweight intelligent devices.

Specification

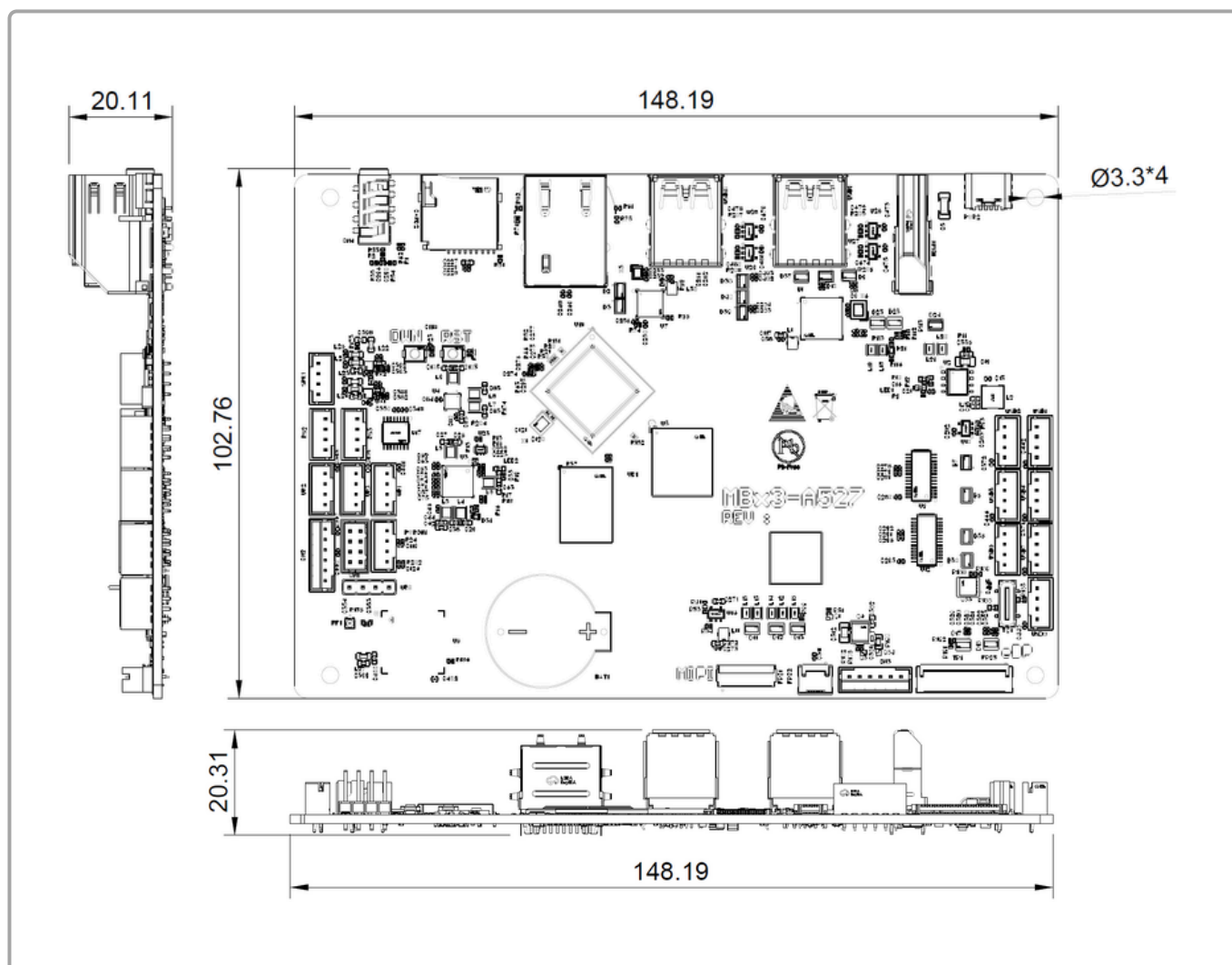
System	Processor	8x ARM Cortex-A55 up to 2.0GHz
	Memory	Onboard LPDDR4 4GB (Optional 2G/3GB)
	Storage	32GB eMMC (Option to 64GB/128GB)



MBx3-A527

Cost-Effective Embedded Board

Dimension(mm)



Specification

System	Graphics	For internal LCD: MIPI-DSI up to 1920x1080; eDP up to 1920x 1080; For external Display: HDMI up to 1920x 1080
	Display	MIPI DSI, eDP, HDMI
	Touch	Support via I2C signal
Connectivity	WLAN	WiFi 6+ BT 5.4 for Option
	LAN	10/100/1000Mbps
I/O Interface	Display Port	1x HDMI
	Ethernet	1x RJ45 connector w/ LED indicator
	USB Port	4x USB 3.0 Type-A
	Audio Port	1x 3.5mm Audio Jack
	Power Input	1x USB Type-C PD, 9V/12V/15V (>20W)
	Other	1x TF Card Slot for storage



MBx3-A527

Cost-Effective Embedded Board

Specification		
Internal I/O	USB Ports	7x USB 2.0 (PH 2.0mm)
	Serial Ports	2x RS232 (PH 2.0mm), 3x TTL UART (PH 2.0mm, 4P)
	Display Port	1x MIPI DSI, 1x eDP
	Touch Conn.	1x 6-Pin Connector (PH 2.0mm)/1 x 6-Pin FFC Connector, P=0.5mm
	Audio	1x 1W speaker stereo Amp 4Ω
	RTC	Support via 1x PH 1.25mm
	Others	1x Type-C for ADB; 1x Power Key/LED conn. (PH 2.0mm, 4P) ; 1x Reset KEY/GPIO (PH 2.0mm, 4P); 1x SPI Conn. (PH2.0mm, 6P); 1x RST Button, 1x DWN Button
Power Supply		1x USB Type-C PD, 9V/12V/15V (>20W)
Dimension		148.2 x101.6mm (in temporary)
Operating Temperature		-10°C ~ 70°C (0% to 90% RH, non-condensing)
Storage Temperature		-40°C ~ 85°C
Operating System		Android 15, Linux-Debian, Ubuntu

