INTRODUCTION

This is a full-function evaluation carrier board which exposes all the pins of the LattePanda Mu compute module, providing an ideal platform for evaluating and developing each pin. With a wealth of onboard interfaces and expansion slots, it supports the connection of various peripherals and modules, greatly facilitating the testing of hardware and software and their compatibility evaluation, thus shortening the development time.

Complete Pin Exposure

This board completely exposes all the pins of the LattePanda Mu compute module, featuring a rich array of interfaces and expansion slots. These include 4 USB3.0 ports, 2 Intel I225 2.5G network ports, 2 HDMI 2.0 ports, 2 M.2 slots, 1 standard PCIe x1 slot, 1 standard PCIe x4 slot, 1 Type C port, and more. It also reserves a variety of expansion pin headers, supporting the connection and testing of various peripherals and modules.



Wide Voltage Input

This carrier board supports a wide voltage input of 12~20V, allowing it to be used in various power supply environments.

Standard PCIe Slots

Equipped with standard PCIe 3.0 x1 and PCIe 3.0 x4 slots, this carrier board enables the convenient expansion of various peripherals, such as graphics cards, sound cards, network cards, etc.

Dual M.2 Slots

In addition to PCIe slots, it is also equipped with M.2 E key and M.2 B key slots, facilitating the easy expansion of WiFi cards, 4G or 5G cards, etc.

Dual 2.5G Ports

This carrier board features two Intel i225-V 2.5G network ports, supporting high-speed data transmission.

ITX Standard Size

Adopting the ITX motherboard standard size, this product can be directly used with ITX motherboard test benches, making it seamlessly integrate into your various projects and systems.



Note:

1. The LattePanda Mu compute module is not included with this product.

2. To use this product, ensure you already possess the LattePanda Mu compute module.

3. Before plugging or unplugging LattePanda Mu, any cables, or internal interfaces, it is necessary to disconnect the power supply.

Versatile Carrier Boards

DFRobot offers a <u>lite carrier board for the LattePanda Mu</u>, providing a comprehensive development platform with various interfaces for swift design verification.

Additionally, <u>a full-function evaluation carrier board</u> is available, exposing all pins of the LattePanda Mu for extensive hardware and software testing.





Full Evaluation Carrier

Lite Carrier



FEATURES

- Expose of all pins of the LattePanda Mu compute module
- Rich interface: 2x HDMI 2.0 ports, 2x 2.5GbE ports, 4x USB 3.0 ports, etc.

• Extensive expansion slots: 1x PCIe x1 slot, 1x PCIe x4 slot, 2x M.2 slots, etc., allowing for the expansion of various peripherals such as 4G/5G WWAN cards, PCIe cards, and more.

- 12~20V wide voltage input
- ITX standard size

SPECIFICATION

Front I/O Interface

- 1x 3.5mm microphone interface
- 1x 3.5mm headphone interface
- 2x USB 2.0
- 4x USB 3.0
- 1x USB Type-C(supports USB 2.0, USB 3.0, DisplayPort)
- 1x DB9(RS232)
- 1x SIM card slot

Rear I/O Interface

- 1x Power button
- 2x Intel 2.5GbE network interfaces
- 2x HDMI 2.0 interfaces
- 1x DC 5.5x2.5mm power jack
- 1x DC Power 5.08mm Screw Terminal Plug

Expansion Slots

- 1x PCIe 3.0 x1 slot
- 1x PCIe 3.0 x4 slot (multiplexed with the SATA signals)
- 1x M.2 E Key slot: Supports 2230 Type WLAN card (PCIe 3.0 x1, USB 2.0; multiplexed with the Ethernet port 2 (RJ45_2) signals)

• 1x M.2 B Key slot: Supports 3042/3052 Type 4G/5G WWAN card (USB 3.0, USB 2.0)

• 2x SATA 6Gb/s interfaces (multiplexed with the PCIe 3.0 x4 signals)

Pins/Jumpers/Buttons

- 1x CPU fan interface (CPU_FAN)
- 1x System fan interface (SYS_FAN)
- 1x MIPI CSI-2 interface (MIPI_CSI)
- 1x I2S header (I2S1)
- 1x TPM header (TPM)
- 1x eSPI header (ESPI_CON)
- 1x Auto power-on jumper (AUTO_PWR)
- 1x Temperature sensor header (TMP)
- 1x USB 2.0 header (F_USB1)
- 1x Front panel header (F_PANEL1)
- 1x UART and I2C header (UART_I2C_1)
- 1x SoC GPIO header (GPIO_1)
- 1x Speaker interface (SPEAKER)
- 1x HD Audio header (F_AUDIO)
- 1x Function Configuration DIP switches (ID_SW)
- 1x USB header power control jumper (F_USB_PWR)
- 1x Front USB power control jumper (R_USB_PWR)
- 1x PoE power header (POE_IN)
- 1x Hard disk power interface (HDD_PWR1)
- 1x Power input header (POE_OUT)
- ITX Dimension: 170 x 170mm

DOCUMENTS

• <u>Design Files(KiCad)</u>

SHIPPING LIST

- Full-Function Evaluation Carrier Board x1
- SATA Data Cable x2
- SATA Power Cable x1
- Product Manual x1