INTRODUCTION

You are viewing a **2GB RAM** LattePanda **with 32GB internal memory**. LattePanda V1 - A Powerful Windows 10 Mini PC 2GB/32GB (Unactivated) is a complete Windows 10 <u>single board computer</u>. Notice: This mode **does not** include a Windows 10 activation key.

This embedded single board computer runs perfectly on the go. Creating documents with Microsoft Office, playing HD videos and running Windows apps on LattePanda is exactly the same experience as using a regular PC.

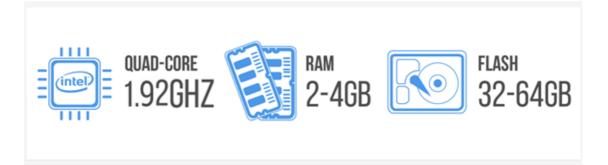
The Smallest X86 SBC

LattePanda V1(Unactivated, 2GB/32GB) is the smallest and cheapest X86 SBC in LattePanda Family. It has everything a regular PC has and can do anything that a regular PC does.



Fast and Powerful

We have updated the processor since LattePanda V1. All versions of the LattePanda now ship with an upgraded CPU (<u>Intel Z8350</u> - up to 1.92GHz!)



Integrated Arduino Compatible Processor

A LattePanda also includes an integrated <u>Arduino</u> compatible co-processor: ATmega32u4, which means it can be used to control and sense the physical world! Whether you are a Windows developer, IoT developer, DIY fanatic, interactive designer, robotics whizz, or maker, a cheapest x86 single board computer can aid your creative process!

This cheapest x86 single board computer is compatible with almost every gadget you know: printers, joysticks, cameras and more. Any peripherals that work on your PC will work on a LattePanda.



Complete Software Resources for Hardware Development

This embedded single board computer intel atom comes **pre-installed with a full edition of Windows 10 Home Edition**, so you can run powerful tools such as Visual Studio, NodeJS, Java, Processing, and more. And this SBC can

compatible with more operating systems: **Raspberry Pi Desktop, Ubuntu, Android x86, other Linux distributions**.

With existing APIs, you can develop your own software and hardware projects on a LattePanda like you would on a normal PC - C#, Javascript, Ruby etc. Say goodbye to your bulky laptop!



Storage

This smallest single board comuter LattePanda V1 onboard onboard 32/64GB eMMC. eMMC is more reliable and has a longer lifespan than TF cards, saving you the trouble of finding TF cards.

Customize LattePanda

LattePanda offers a selection of standard product models to meet the most common application needs of our target market. For those customers who need different features, LattePanda offers customization services. LattePanda provides our customers with a variety of industrial specific product configurations and custom designs to suit customers' specific applications.

For the customization requirement, CLICK HERE

The Best Raspberry Pi Alternative

Due to the global shortage of Raspberry Pi, if you are looking for a Raspberry Pi alternative, we have a product that can meet your needs: LattePanda V1. It can achieve all the functions that Raspberry Pi 4B can achieve, not to mention that it also supports the Windows 10 operating system. In the current situation where Raspberry Pi 4B is out of stock and prices are soaring, LattePanda V1 is your best choice!

LattePanda V1: The Best Raspberry Pi Alternative!

| | Raspberry Pi 4B | LattePanda V1 Windows 10 SBC | Highlights of LattePanda V1 |
|--------------------------|---|---|---|
| Processor | Broadcom BCM2711 | Intel Atom x5-Z8350 | |
| Thermal Design Power | 4W | 2W | Lower power consumption |
| CPU Spec | Cortex-A72 (ARM v8), 4-Core, 4-Thread, up to 1.5GHz | x86-64, 4-Core, 4-Thread, up to 1.92GHz | |
| GPU Spec | Broadcom VideoCore VI, up to 500MHz | Intel HD Graphics 400, up to 500MHz | |
| Memory | 2/4/8GB LPDDR4 | 2/4GB LPDDR3 | |
| Storage | None eMMC MicroSD Card Slot | Onboard 32/64GB eMMC MicroSD Card Slot | Onboard eMMC is more reliable and has a longer lifespan thar TF cards, saving you the trouble of finding TF cards. |
| USB | 2 x USB 3.0 Ports 2 x USB 2.0 Ports | 1 x USB 3.0 Port 2 x USB 2.0 Ports | |
| Connectivity | Gigabit Ethernet 802.11ac Wi-Fi, Bluetooth 5.0 | 100M Ethernet 802.11n Wi-Fi, Bluetooth 4.0 | |
| Display | 2 x micro-HDMI Ports 2-lane MIPI DSI | 1 x Standard HDMI Port 4-lane MIPI DSI | |
| Co-processor | None | ATmega32u4 (Arduino Leonardo) | Integrated Arduino Compatible Processo |
| GPIO | 40 x Digital IO Pins | 20 x Digital IO Pins, including: 12 x Analog Pins | Enable to collect Analog and Digital signals directly |
| Power Supply | 5V 3A | 5V 2.5A | |
| Operating System | Raspberry Pi OS, Ubuntu, other Linux distributions | Windows 10, Raspberry Pi Desktop, Ubuntu, Android x86, other Linux distributions | More operating systems compatible |
| Operating Temperature | 0~50 ℃ | 0~60 ℃ | |
| Board Dimensions | 85mm x 56mm | 88mm x 70mm | |
| | As market conditions | Start from \$105 | |

LattePanda V1 Selection Guide

| | | LattePanda V1 Sele | oction Guide | | |
|----------------------------------|--|-----------------------------------|-------------------------------------|----|--|
| Product Name | LattePanda 2GB/32GB(Unactivated) | LattePanda 2GB/32GB(Activated) | LattePanda 4GB/64GB(Unactivated) | La | |
| SKU | DFR0444 | DFR0418 | DFR0419 | | |
| System | | Windows 10 HOME | | | |
| Туре | 64-bit | | | | |
| CPU | Intel Cherry Trail Z8350 | | | | |
| Memory | 2GB | | | | |
| Storage | 32GB | | | | |
| Co-processor | ATmega32u4 | | | | |
| Wireless | Wi-Fi: IEEE 802.11n Bluetooth 4.0 | | | | |
| Dimensions | 88mm x 70mm | | | | |
| Recommend Reasons In Short | The Cheapest Development Board in LP Family | Activated Win10 Home | Better Performance | W | |

APPLICATIONS

- Data Research
- Work as Regular PC
- A Powerful Brain for Robot
- Security Monitoring with Facial Recognition



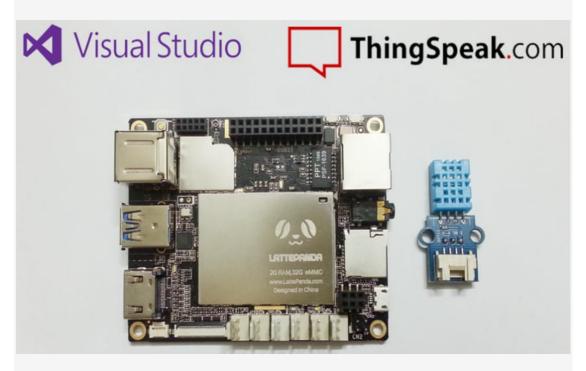
SPECIFICATION

- Intel Cherry Trail Z8350 Quad Core Processor
- Base Frequency: 1.44GHz (1.92GHz Burst Frequency)
- Operating System: Windows 10 Home Edition (Unactivated)
- RAM: 2GB DDR3L
- Storage Capacity: 32GB
- GPU: Intel HD Graphics, 12 EUs @200-500Mhz, single-channel memory
- USB 3.0 x 1, USB 2.0 x 2
- Wi-Fi 802.11n 2.4G
- Bluetooth 4.0
- Integrated Arduino Co-processor: ATmega32u4 (Arduino Leonardo)
- Video output: HDMI and MIPI-DSI
- Onboard touch panel overlay connector
- Supports 100Mbps Ethernet
- Intel Processor GPIO x 6
- ATmega Processor GPIO x 20
- Gravity Interface Connectors x 6
- Voltage: 5V@2A
- Board Dimensions: 88 x 70mm / 3.46 x 2.76"
- Package Dimensions: 110 x 94 x 30 mm/4.33 x 3.70 x 1.18"
- NET Weight: 55g
- Gross Weight: 100g

PROJECTS

Project 1. <u>Getting Started with LattePanda</u> Introduction:

In this project, he learn how he communicate between Arduino (Internal Arduino chip on LattePanda) and Microsoft Visual Studio and send data from the Arduino to use a Windows Application. Following is the original article.



Project 2. Обзор одноплатного ПК LattePanda от магазина DFRobot

Introduction:

В видео представлен обзор одноплатного компьютера LattePanda, который работает под управлением ОС Windows 10.

https://www.youtube.com/embed/176QgMM9X4I

Project 3. Mantis Elite Cam LattePanda Project

Introduction:

Using a LattePanda WIndows 10 single board computer to take screen shots from the Mantis Elite Cam microscope and put them automatically on Dropbox.

https://www.youtube.com/embed/BoL8gD8IcXg

Project 4. Unboxing and review of a LattePanda

Introduction: Unboxing and review of a LattePanda from DF Robot.

https://www.youtube.com/embed/z5EXNfHYPfQ

Project 5. DIY A Steampunk Computer

Introduction:This lattepanda DIY project is shared by Marco Bernal.He took one of the Lattepanda and made the following cool steampunk computer.



DOCUMENTS

- Official Website
- User Guide
- FAQ
- <u>Github Repository</u>
- <u>3D Model</u>
- <u>Compliance Certificates</u>
- Pin Mapping
- RoHS, FCC and CE Compliant
- Lattepanda Official Forum

SHIPPING LIST

- LattePanda 2G/32GB x 1
- WiFi Antenna x 1
- Printed Safety Precautions x 1