

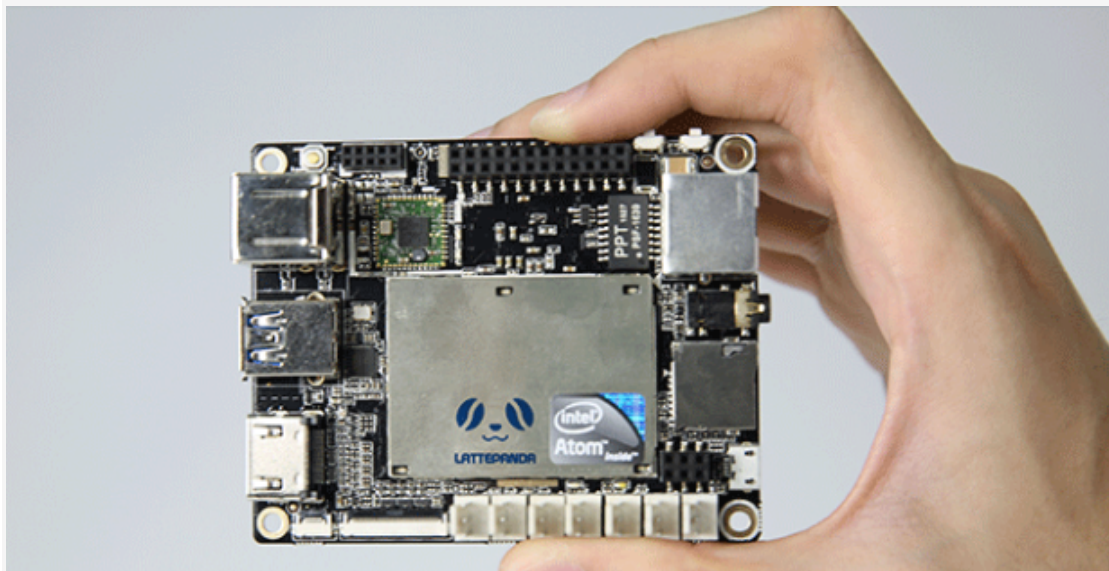
## INTRODUCTION

You are viewing a **4GB RAM [LattePanda](#) with 64GB internal memory**. It 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, 4GB/64GB) is the smallest 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 ([Intel Z8350](#) - up to 1.92GHz!)



QUAD-CORE  
1.92GHZ



RAM  
2-4GB



FLASH  
32-64GB

## Integrated Arduino Compatible Processor

A LattePanda also includes an integrated [Arduino](#) 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 smallest x86 single board computer can aid your creative process!

This smallest 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 computer LattePanda V1 onboard 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!

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

## LattePanda V1 Selection Guide

| LattePanda V1 Selection Guide |   |                                |                                  |   |
|-------------------------------|---|--------------------------------|----------------------------------|---|
| Product Name                  | LattePanda 2GB/32GB(Unactivated)            | LattePanda 2GB/32GB(Activated) | LattePanda 4GB/64GB(Unactivated) | LattePanda 4GB/64GB(Enterprise License) |
| SKU                           | <a href="#">DFR0444</a>                     | <a href="#">DFR0418</a>        | <a href="#">DFR0419</a>          | <a href="#">DFR0470-ENT</a>             |
| System                        |   | Windows 10 HOME                |                                  | Windows 10 Enterprise LTSC              |
| Type                          | 64-bit                                      |                                |                                  |   |
| CPU                           | Intel Cherry Trail Z8350                    |                                |                                  |   |
| Memory                        | 2GB   |                                |                                  | 4GB                                     |
| Storage                       | 32GB  |                                |                                  | 64GB                                    |
| Co-processor                  | ATmega32u4                                  |                                |                                  |   |
| Wireless                      | Wi-Fi: IEEE 802.11n<br>Bluetooth 4.0        |                                |                                  |   |
| Dimensions                    | 88mm x 70mm                                 |                                |                                  |   |
| Recommend Reasons In Short    | The Cheapest Development Board in LP Family | Activated Win10 Home           | Better Performance               | Windows 10 Long Term Servicing Branch   |

## APPLICATIONS

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

A POWERFUL BRAIN FOR A ROBOT



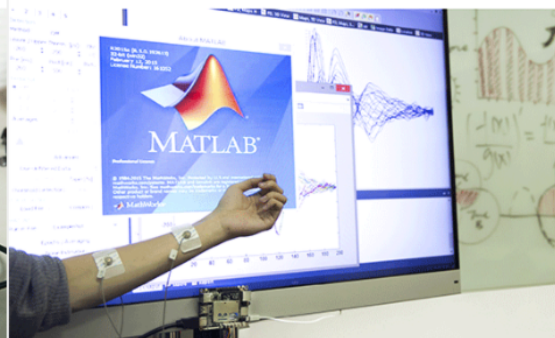
SECURITY MONITORING WITH FACIAL RECOGNITION



WORKS AS REGULAR PC



DATA RESEARCH



## SPECIFICATION

- Intel Cherry Trail Z8350 Quad-Core Processor
- Base Frequency: 1.44GHz (1.92GHz Burst Frequency)
- Operating System: Windows 10 Home Edition (Unactivated)

- RAM: 4GB DDR3L
- Storage Capacity: 64GB
- 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.** 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/watch?v=176QgMM9X4I>

**Project 2.** [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.



### Project 3. [LattePanda Project: Water Cooling LattePanda](#)

**Introduction:** Rasim Muratovic is a YouTube reviewer. He used the water to cool the LattePanda. We'd like to share this interesting project with all of you.



## DOCUMENTS

- [Official Website](#)
- [User Guide](#)
  
- [Github Repository](#)
- [3D Model](#)
- [Compliance Certificates](#)
- [LattePanda V1.0 Selection Guide](#)
- [FAQ](#)
- [RoHS, FCC and CE Compliant](#)

## SHIPPING LIST

- LattePanda 4G/64GB x 1
- WiFi Antenna x 1
- Printed Safety Precautions x 1