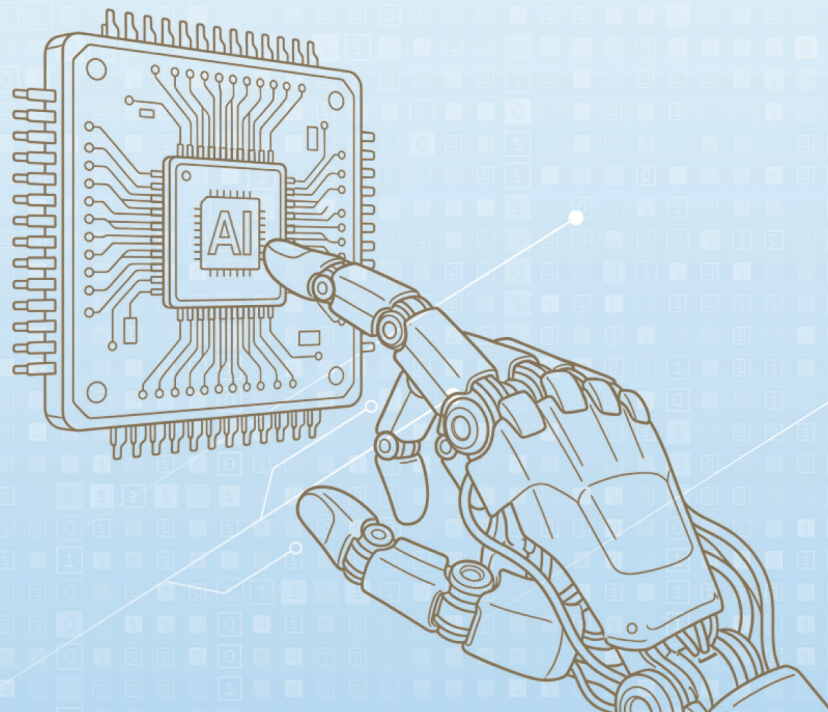


2026

PRODUCT CATALOG

Built on x86. Built to Deploy



www.lattepanda.com

About Us

www.lattepanda.com

LattePanda provides compact x86 computing platforms for solution providers and system integrators.

Our palm-sized SBCs and compute modules offer full Windows and Linux compatibility, rich I/O, and stable x86 performance, making them ideal for fast product integration and secondary development.

We support flexible customization, long-term supply, and open-source hardware designs, helping partners quickly build, validate, and deliver solutions for edge AI, robotics, AIoT, and compact handheld devices.

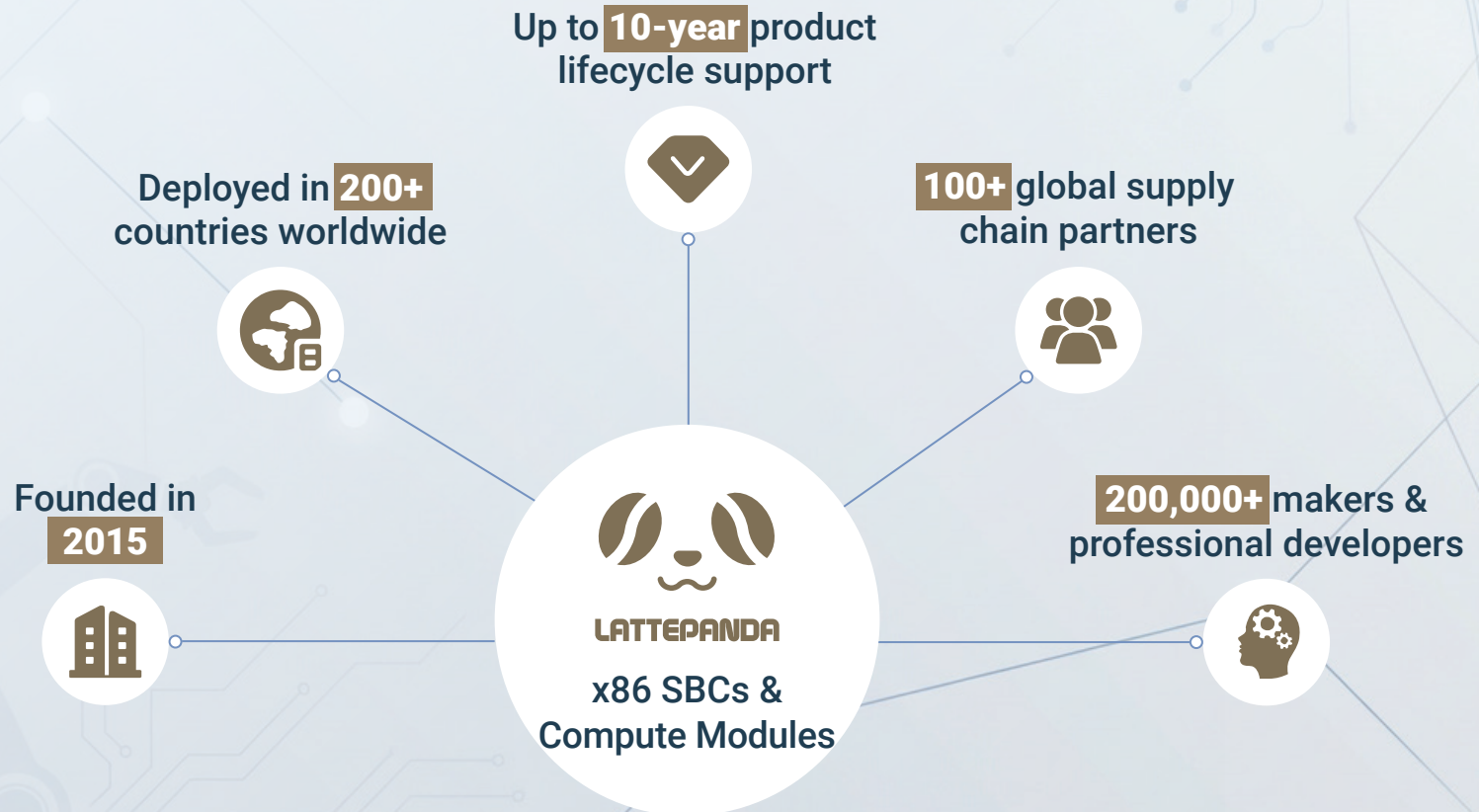


Table of Contents

IOTA



- Palm-sized
- x86 SBC
- Edge AI
- Robotics
- Intel® N150
- RP2040
- PoE
- UPS
- Embedded

MU



- Micro x86 Compute Module
- Open-source Carrier
- Intel® N100/N305
- ODM
- Flexible I/O
- Custom Design

Sigma



- Ultimate Performance
- Single Board Server
- AI Inference
- Intel® Core i5 1340P
- Edge AI
- Thunderbolt 4
- Rich I/O

3 Delta



- Prototyping & Deploy
- Ultra-slim
- Intel® N5105
- Expansion-Friendly
- Handheld device
- Robotics

Accessories



- Touch Display
- Protective Case
- Heatsink
- Expansion Board
- Wireless
- Power Adapter
- Extension Adapter

LattePanda IOTA

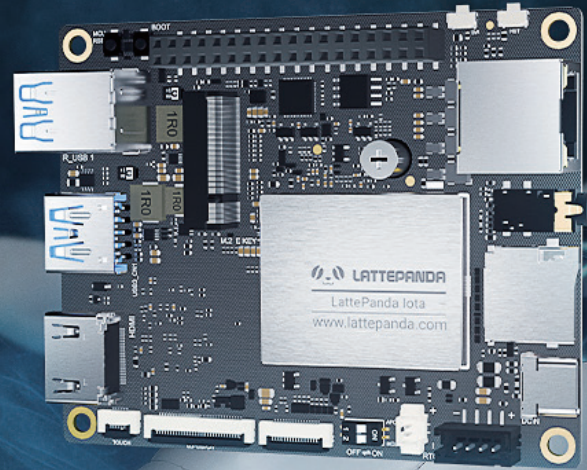
LattePanda IOTA delivers a computing platform for scalable **edge deployments**. It supports **long-term availability, native Windows and Linux** operation, and flexible system integration through Ethernet, **PoE, 4G, and M.2 expansion**, making it suitable for commercial, industrial, and infrastructure-level applications.



LATTEPANDA
IOTA

A Palm-Sized

x86 Single-Board Computer





Intel® N150

4

Core

4

Thread

3.6

up to

GHz

RP2040

Co-processor

Support



Windows



Ubuntu

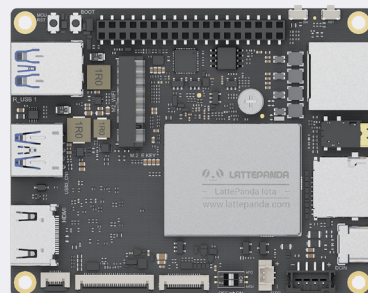
Configurable

6W to 15W TDP

Modular Expansion Ecosystem

- UPS Backup Power
- 51W PoE Single-Cable Power
- M.2 AI Acceleration
- 4G LTE Connectivity

LattePanda IOTA



Rich I/O Connectivity



3 x USB 3.2 Gen 2 Type A



PCIe FPC Connector 3.0

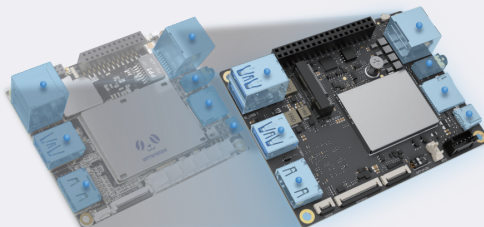


M.2 E Key 2230 Slot
Gigabit Ethernet



HDMI 2.1 and eDP

**Seamless Upgrade
from
LattePanda V1**



Credit Card Size

88x70(mm)

IOTA Specification

Product Name	LattePanda IOTA		
SKU	DFR1226 / DFR1226-ENT / DFR1227 / DFR1227-ENT		
CPU	- Intel® Processor N150 4 Cores/4 Threads		
Graphics	Intel® Graphics 24 Execution Units		
Memory	8GB/16GB LPDDR5 4800MT/s with In-band ECC		
Storage	64GB/128GB eMMC 5.1		
USB Ports	3 x USB 3.2 Gen 2 Type A 10Gbps 1 x USB 2.0 Pin Header 1 x USB Type-C PD 15V Power Input Only		
Expansion Slots	- M.2 E Key 2230 Slot PCIe/CNVio - TF Card Slot USB2.0 - PCIe FPC Connector PCIe 3.0x1 0.5mm 16 Pin		
Co-Processor	RP2040 MCU		
GPIO & Other Features	- Up to 3x Analog Inputs - Up to 16x Digital Input/Output 1x UART 1x USB 2.0 1x RTC Battery Connector 1.25mm 1x Fan Port MX1.25 4Pin PWM 5V 1x DIP Switch auto power on; MCU power control 1x Power Management Connector MX1.25 10 Pin 1x PH2.0 4-Pin Connector Power Input 1x Speaker Audio		
Power Supply	- USB Type-C PD 15V - PH2.0-4Pin Power Input 10~15V DC		
Operating System	- Windows 10 & 11 - Ubuntu 22.04 & 24.04		
Dimension	88mm x 70mm x 19mm		

Application



Edge AI Computing



Industrial Control



Smart Terminals



AIoT Devices

LattePanda MU

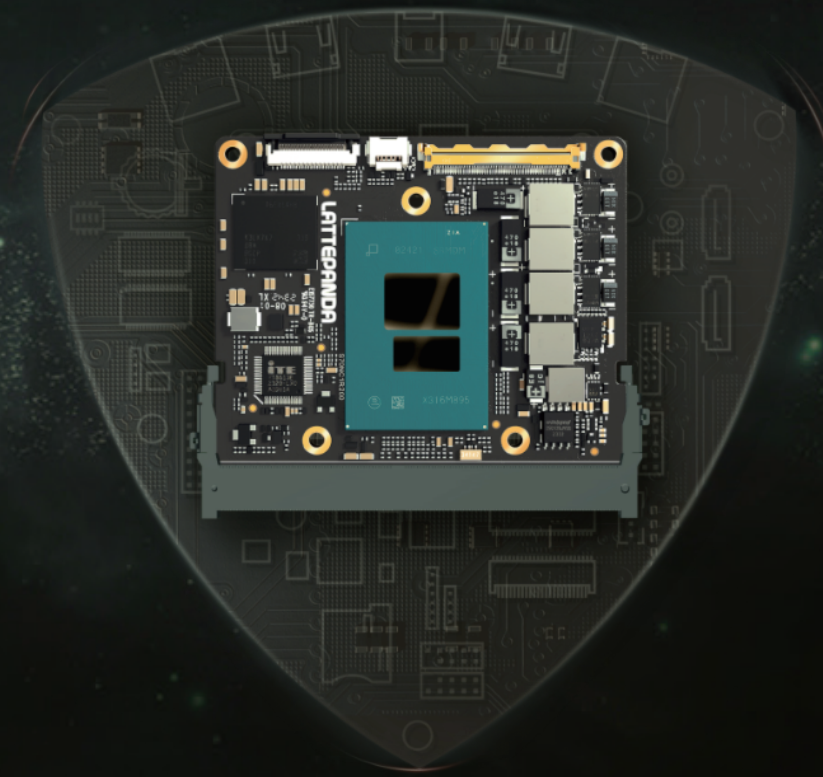
Compute Module

LattePanda MU is a micro x86 compute module designed for custom system designs with long-term supply stability.

Its modular architecture enables flexible, application-specific customization while reducing development complexity, lowering design risk, and accelerating commercial deployment.

LATTEPANDA **MU**

A micro x86 compute module fits unique solutions.





Intel® Core i3-N305

up to
3.8GHz
Turbo



Windows



Ubuntu

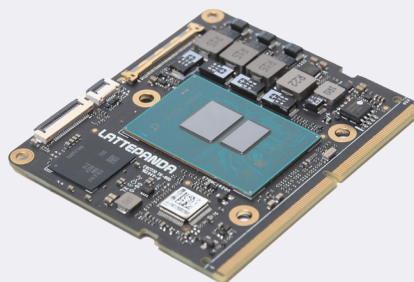


Linux

Configurable

9W to 35W TDP

LattePanda Mu



BIOS & OS Customization



Long-Term Supply
Availability



Carrier Board Design &
Manufacturing Services

**Open-Source Hardware
Reference Design**

I/O & Expansion

9

PCIe 3.0 Lanes

4

USB 3.2

8

USB 2.0

3

HDMI / Display Port

Dual

SATA 3.0

64

GPIOs

**69.6x60
(mm)**

Credit Card Size



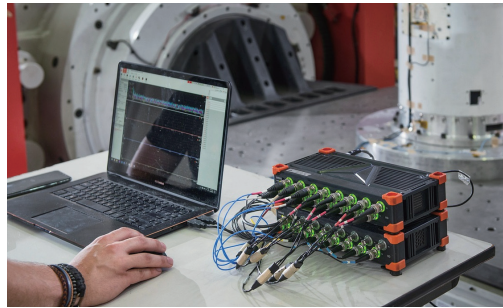
MU Specification



Product Name	LattePanda MU N100		LattePanda MU N305
SKU	DFR1146 / DFR1146-ENT / DFR1147		DFR1149
CPU	• Intel® Processor N100 4 Cores Up to 3.4GHz		• Intel® Core i3-N305 8 Cores Up to 3.8GHz
Memory	• 8GB LPDDR5 4800MT/s With In-band ECC • Configurable to 16GB		• 16GB LPDDR5 4800MT/s With In-band ECC
Storage	• 64GB eMMC 5.1		
Expansion Slots	• Up to 9 PCIe 3.0 Lanes • Up to 4 USB 3.2 10Gbps • Up to 2 SATA 3.0 6Gbps • 8x USB 2.0 • 4x UART • 4x I2C • Expandable to 64 GPIOs		
Power Supply	• 1x eDP 1.4 • 3x HDMI 2.0/DisplayPort 1.4 • Output up to 3 signals simultaneously		
Operating System	• Windows 10 & 11 • Ubuntu 22.04 & 24.04		
Dimension	• 60mm x 69.6mm		

Application

www.lattepanda.com



Instrumentation – Portable Spectrum Analyzer

- LattePanda Mu enables seamless ARM-to-x86 migration.
- Supports a broad x86 software ecosystem without additional system or driver adaptation.
- Interfaces collect data with MATLAB and LabVIEW for real-time on-site processing.
- Intel 7 Process offers greater energy efficiency.



AGV (Automated Guided Vehicle)

- Modular design allows configuration changes without modifying the carrier board.
- ROS 2 is supported out of the box without additional system or driver adaptation.
- Up to 8 CPU cores and a 2.5 TOPS GPU enable CPU mapping and AI acceleration without external GPU or NPU.
- PCIe 3.0 x4 interface enables dedicated GPU expansion for large AI models.

Application



Video Livestreaming / Surveillance Recording Device

- Integrated GPU supports multi-channel H.265 and H.264 video encoding.
- Supports optional Wi-Fi or 5G modules via modular carrier board slots.
- 80 × 120 × 30 mm compact design for easy integration into live shooting systems.

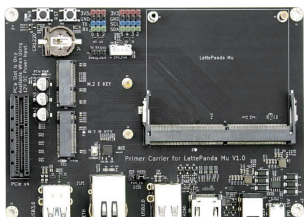


AI Interactive / Service Robot

- Built-in GPU can support AI acceleration.
- Local LLM enables natural conversation and communication.
- Advanced AI algorithms support facial, object, and speech recognition.
- GPIOs support various sensor, actuator, and peripheral device connections.

MU Unlimited Solutions

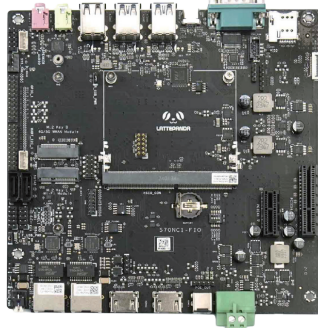
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Lite Carrier

- PCIe 3.0 x4
- 3.5-inch Standard Size
- Open-source Design

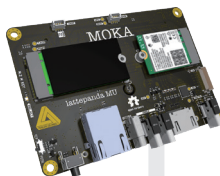
SKU: DFR1142



Full Evaluation Carrier

- Standard PCIe Slots
- Support WWAN Module
- ITX Standard Size

SKU: DFR1141

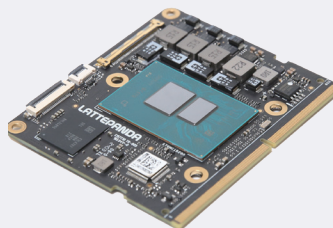


Mini Carrier

- Designed by Pierluigi Colangeli

LattePanda Mu

Micro x86 Compute Module



- Intel® N100 / Core i3-N305
- 8GB/16GB Memory
- 64GB Storage
- Credit Card Size



AGV Controller Carrier

- Designed by Chengdu Beaver



Cyberdeck Carrier

- Designed by Ben Makes Everything



PCIe Carrier

- Designed by Electronic Nerd



NVMe Carrier

- Designed by El-Luhb

MU Carrier Board Comparison

Category	Lite Carrier Board	Full-Function Evaluation Carrier Board
SKU	DFR1142	DFR1141
Product Positioning	• Compact carrier for rapid prototyping • Cost-efficient integration	• Full-featured carrier for evaluation system development • commercialization
Target Use Case	• Embedded devices • Space-constrained systems • Quick POC	• Industrial systems • Gateways • Servers • OEM/ODM platforms
Form Factor	• 3.5-inch embedded motherboard (146 × 102 mm)	• ITX standard (170 × 170 mm)
Mu Pin Exposure	• Essential interfaces	• Near full pin breakout
Ethernet	• 1 × Gigabit Ethernet	• 2 × 2.5GbE Ethernet
USB Interfaces	• 2 × USB 3.2 Gen2 (10Gbps) • 2 × USB 2.0	• 4 × USB 3.0 • 2 × USB 2.0 • 1 × USB Type-C (USB + DP)
Display Output	• 1 × HDMI 2.0 (4K)	• 2 × HDMI 2.0 (4K)
PCIe Expansion	• 1 × PCIe 3.0 x4 slot	• 1 × PCIe 3.0 x1 slot • 1 × PCIe 3.0 x4 slot
M.2 Expansion	• M.2 M Key 2230 (NVMe / AI) • M.2 E Key 2230 (Wi-Fi / BT)	• M.2 E Key 2230 (WLAN) • M.2 B Key 3042/3052 (4G / 5G WWAN)
Storage Interfaces	• NVMe via M.2	• 2 × SATA 6Gb/s + NVMe
Industrial Interfaces	• UART • I2C • GPIO	• RS232 (DB9) • GPIO • TPM • MIPI CSI-2 • I2S
Audio	—	• 1x HD Audio header (F_AUDIO) • 1x Speaker interface (SPEAKER)
Power Input	• USB Type-C: 15V (Max 3A) • DC 5.5x2.5mm: 12~20V (Max 10A)	• 1x DC 5.5x2.5mm power jack • 1x DC Power 5.08mm Screw Terminal Plug
Auto Power-On	• Supported	• Supported
Cooling Support	• CPU fan header	• CPU fan + system fan headers
Development Stage Fit	• Prototype • Pilot deployment	• Evaluation • Productization • Long-term deployment
Cost Level	• Lower	• Medium
Typical Applications	• Embedded terminals • Compact edge nodes	• Industrial gateways • Edge servers • AI systems

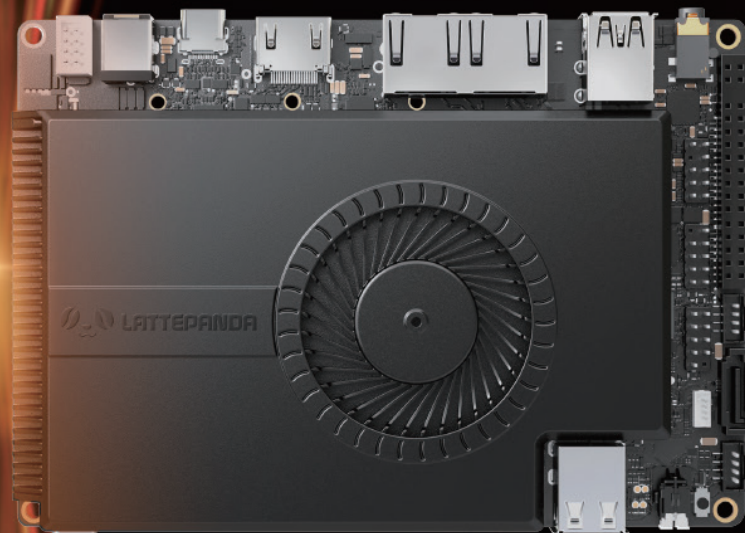
LattePanda SIGMA

LattePanda Sigma packs ultimate performance into a compact single board server. Driven by **Intel® Core™ i5-1340P (12 cores, 16 threads)** and up to 32GB LPDDR5-6000 memory, it delivers exceptional multitasking power, high-efficiency computing, and robust graphics performance for demanding server and edge workloads.



LATTEPANDA
SIGMA

A Hackable Single Board
Server with Mighty Power





Intel® Core™ i5-1340P

12

Core

12

Thread

up to

4.6

GHz

Multiple M.2 Expansion Options



NVMe SSD storage (M-Key)

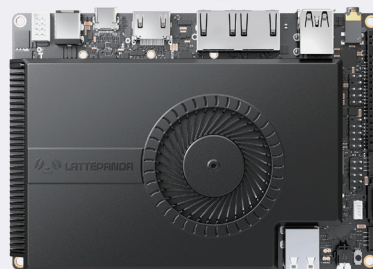


SATA SSD & cellular connectivity
(4G/5G via B-Key)



Wireless networking
(Wi-Fi via E-Key)

LattePanda Sigma



Multiple 4K Display Outputs



HDMI 2.1



USB-C DisplayPort



eDP

Extensive High-Speed Interfaces

2x Thunderbolt 4

I/O Interfaces

2x 2.5Gb Ethernet

Network

4x M.2 Slots

Expansion

Form Factor

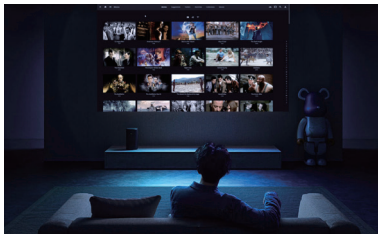


146 x 102
(mm)

Sigma Specification

Product Name	LattePanda Sigma		
SKU	DFR1080 / DFR1081 / DFR1090 / DFR1091		
CPU	- Intel® Core™ i5-1340P 12-Core	16-Thread 3.40 GHz (Efficient-Core)	12M Cache Up to 4.60 GHz (Performance-Core)
Memory	Up to 32GB	Dual-Channel LPDDR5-6400MHz	
Storage	M.2 NVMe/SATA SSD (Separately Installed)		
Network	2 x 2.5GbE RJ45 Ports (Intel® i226-V)		M.2 Wireless Module (Separately Installed)
USB Ports	2 x USB2.0 Type-A (480Mbps)	2 x USB3.2 Gen2 Type-A (10Gbps)	2 x Thunderbolt™ 4 Type-C (40Gbps)
Expansion Slots	- M.2 M Key: PCIe 3.0 x 4 - M.2 M Key: PCIe 4.0 x 4	- M.2 B Key: SATA III/PCIe 3.0 x 1, USB2.0, USB3.0, SIM - M.2 E Key: PCIe 3.0 x 1, USB2.0, Intel CNVio	Micro SIM Card Slot
Display	HDMI 2.1, up to 4096 x 2304 @ 60Hz	DP 1.4a via USB Type-C, up to 7680 x 4320 @ 60Hz	eDP 1.4b, up to 4096 x 2304 @ 120Hz
Operating System	Windows 10 & 11	Ubuntu 22.04	
Dimension	146mm x 102mm		

Application



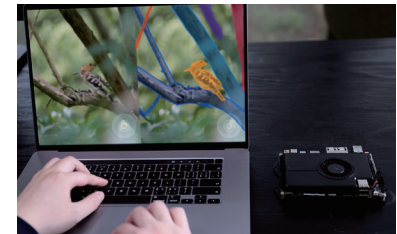
Media Server



Game Server



Home Automation



AI Inference

LattePanda 3 Delta

LattePanda 3 Delta is a ready-to-deploy single-board computer designed for stable, long-term embedded and industrial applications, offering a **slimmer form factor, balanced performance, and cost-effective pricing**, where system compatibility and deployment reliability matter more than customization.



LATTEPANDA
3 DELTA

Faster, Friendlier than Ever

A Pocket-sized Hackable Computer for
Huge Creativity





Intel® Celeron® N5105

4

Core

Configurable

10W TDP

Ultra-slim profile

Expansion Capability



Dual M.2 slots



M.2 B Key for 4G/5G
module or SATA SSD



M.2M Key for NVMe SSD

LattePanda 3 Delta



Display Outputs



Triple display output
via HDMI,
DisplayPort over USB-C,
and eDP



Dual 4K HDR support

GPIO & MCU

Integrated ATmega32U4 Arduino coprocessor

USB & Data Interfaces

USB 3.2 Gen2

1x

USB 3.2 Gen1

2x

Network Connectivity



Wi-Fi 6

2.5Gb Ethernet

Network

Industrial BIOS Features

- Auto power-on
- Watchdog timer
- Serial port redirection

3 Delta Specification

Product	LattePanda 3 Delta		
SKU	DFR0981 / DFR0982		
CPU	• Intel® Celeron® N5105	• 2.0-2.9GHz Quad-Core	• 4 Thread
Graphics	• Intel® UHD Graphics (Frequency: 450 – 800MHz)		
Memory	• LPDDR4 8GB 2933MHz		
Storage	• 64GB eMMC		
USB Ports	• 2x USB 3.2 Gen1 Type A • 1x USB 3.2 Gen2 Type A	• 1x USB Type C, Supports PD, DP, USB 2.0 • 1x USB 2.0 Pin Header	
Expansion Slots	• 1x M.2 M Key, 2x PCIe 3.0, Supports NVMe SSD	• 1x M.2 B Key, 1x PCIe 3.0, Supports USB 2.0, USB 3.0, SATA, SIM	
Co-Processor	• ATMEGA32U4		
GPIO & Other Features	• 12x Analog Inputs • Up to 23x Digital Input/Output (7 PWM)* • 1x Audio Connector	• 1x UART • 1x I2C • 1x SPI	• 1x 4-Pin RS232 Header • 1x Fan Port(4 Pin 1.25mm PWM 5V) • 1x 4-Pin Header (Power and Switch)
Audio	• Microphone + Headphone Combo Connector		
Power Supply	• DC Jack Input: 12V DC	• Type-C Input: 12/15V DC	
Dimension	• 125mm x 78mm x 16mm		

Application



Digital Signage



Service Robot



Smart Gateway



Smart Scale

LattePanda Family

www.lattepanda.com

Empowering the Edge with x86

Single Board Computer



LattePanda IOTA
SKU: DFR1226



LattePanda 3 Delta
SKU: DFR0981



LattePanda Sigma
SKU: DFR1080



LattePanda MU
SKU: DFR1146

Carrier Board

MU



Lite Carrier Board
SKU: DFR1142

MU



**Full-Function Evaluation
Carrier Board**
SKU: DFR1141

Expansion Board

IOTA



PoE Exp. Board
SKU: DFR1248

IOTA



M.2 M Key Exp. Board
SKU: DFR1250

IOTA



UPS Exp. Board
SKU: DFR1247

IOTA



4G LTE Exp. Board
SKU: DFR1249

3 DELTA



RS232 Exp. Shield
SKU: DFR0778

3 DELTA



RS485 Exp. Shield
SKU: DFR0779

3 DELTA



UPS Exp. HAT
SKU: DFR0682

SIGMA



UPS Exp. HAT
SKU: DFR1095

Heatsink

IOTA



Active Cooler
SKU: FIT1027

IOTA



Fanless Heatsink
SKU: FIT1028

MJ



Active Cooler
SKU: FIT0981

MJ



Fanless Heatsink
SKU: FIT0989

MJ



Thin Heatsink
SKU: FIT0982

Protective Case

IOTA



Aluminum Heatsink Case
SKU: FIT1029

SIGMA



Aluminum Heatsink Case
SKU: FIT0949

SIGMA



Vertical Case
SKU: FIT0968

3 DELTA



Aluminum Heatsink Case
SKU: FIT0946

3 DELTA



Metal Cooling Case
SKU: FIT0945

Touch Display



**7" eDP IPS
Touch Display**
SKU: FIT1030/FIT0551/FIT0950



**11.6" eDP IPS
Touch Display**
SKU: FIT0955



**15.6" Type-C
Touch Display**
SKU: DFR1045

Wireless Module



**Intel® AX210 WiFi 6E
Module**
SKU: FIT0822



**Intel® BE200 WiFi 7
Module**
SKU: FIT1004



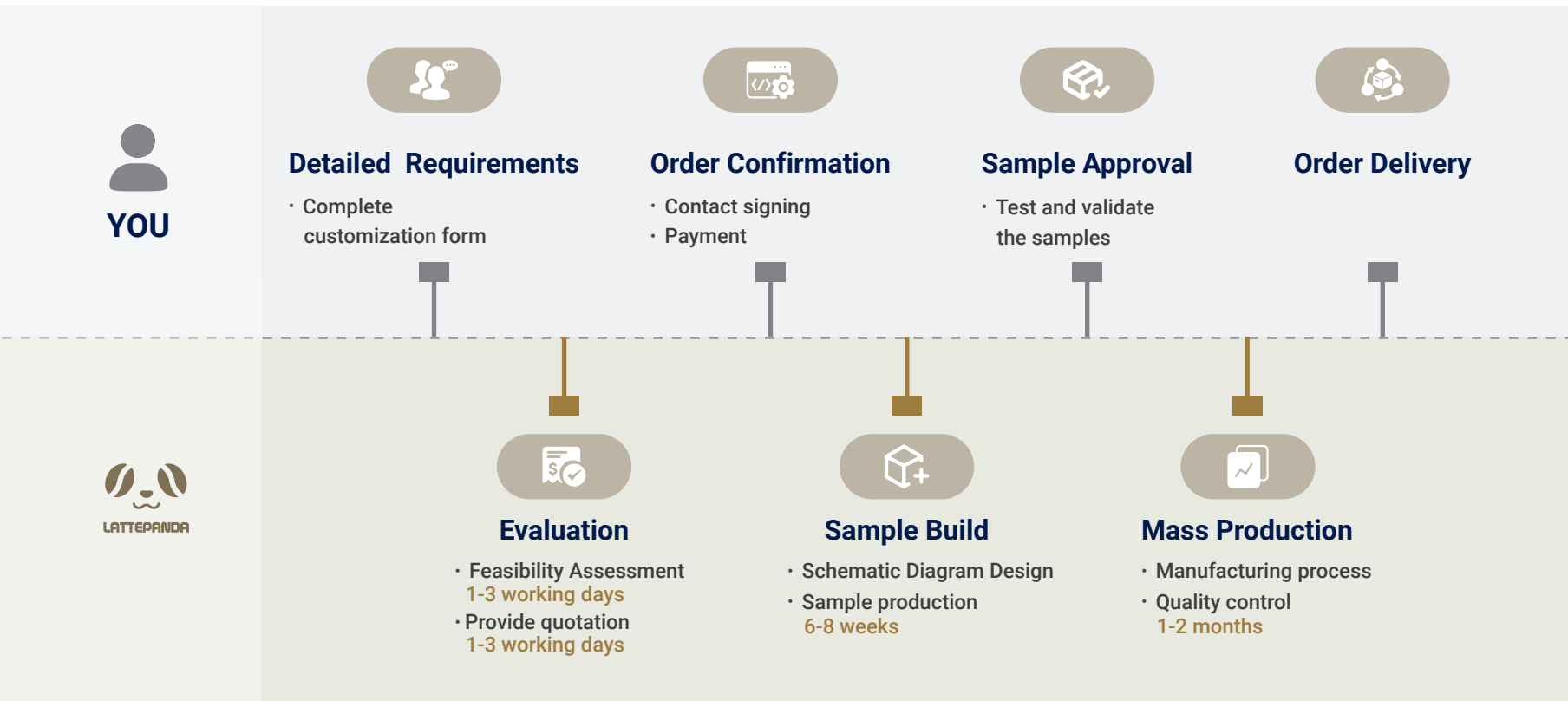
**SIM7600G-H-M2 4G
Cellular Module**
SKU: TEL0158

Customization Service

www.lattepanda.com

LattePanda offers comprehensive product customization services to meet the diverse demands of our customers. We can adjust product hardware and software configurations based on specific customer requirements to ensure seamless integration with existing systems and devices. We are committed to providing flexible and efficient customized solutions to drive our customers' innovation and business success.

Customization Process



Vibrant Online Community



GitHub

[LattePandaTeam](https://github.com/LattePandaTeam)



Discord

[LattePanda](https://discord.com/invite/LattePanda)



Instagram

[lattepanda_cn](https://www.instagram.com/lattepanda_cn)



Facebook

[lattepandacn](https://www.facebook.com/lattepandacn)



YouTube

[lattepanda6547](https://www.youtube.com/channel/UC6547lattepanda)



X

[LattePandaCN](https://twitter.com/LattePandaCN)



LinkedIn

[lattepanda](https://www.linkedin.com/company/lattepanda)



Reddit

[LattePanda_Official](https://www.reddit.com/user/LattePanda_Official)



LATTEPANDA

2026 Product Catalog

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