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INDUSTRIAL PRODUCT DATASHEET

SenseCAP LoRa Gateway based on ReComputer - X86 Development Board (J4125-08-00-512SSD) V2.0 (With Fan)

Compact fan-cooled edge computing device powered by Intel® Celeron® J4125 with 8GB LPDDR4 and 512GB SSD, offering plug-and-play deployment, cloud service, high-security authentication, and 10W low power consumption.

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Overview



The SenseCAP LoRa Gateway based on ReComputer - X86 Development Board (J4125-08-00-512SSD) V2.0 (With Fan) is a compact, fan-cooled edge computing device built around the reComputer X86 Development Board, designed for developers, system integrators, and industrial users. It features an Intel® Celeron® J4125 quad-core processor, 8GB LPDDR4 memory, a 512GB internal SSD, plug-and-play no-code deployment, one-stop cloud service, built-in TPM2.0 and ECC608 crypto chip, and low power consumption of 10W.

Key Features

The SenseCAP M4 is a compact, fan-cooled edge computing device built around the reComputer X86 Development Board (J4125-08-00-512SSD) V2.0. It is designed for developers, system integrators, and industrial users who need a reliable, low-power hardware platform for deploying edge computing and customized software applications.

Powered by an Intel® Celeron® J4125 quad-core processor with 8GB LPDDR4 memory and a 512GB internal SSD, the SenseCAP M4 delivers solid computing performance in a small form factor. Its flexible software environment supports a wide range of applications, from IoT gateways and edge data processing to industrial control and software-defined networking.

- **Plug and Play:** Provide a no-code experience that enables users to finish deployment.
- **Cloud Service:** Provide a one-stop cloud service to help users purchase, deploy, manage, and monitor their devices.
- **Excellent Performance:** Powered by Intel® Celeron® J4125 (Frequency: 2.0 - 2.7GHz) with 4 cores and 4 threads. Built-in TPM2.0 cryptographic processor and ECC608 crypto chip, high-security authentication, and reliable connectivity.
- **Low Power Consumption:** 10w low power consumption, 7.2 kWh per month, cost $1.008 per month (global average kWh price of $0.144/per kWh).

Product Gallery















Specification

Components	SenseCAP M4
Processor	Intel® Celeron® J4125 (Frequency: 2.0 - 2.7GHz)
Coprocessor	Raspberry pi@ RP2040 32bit Dual-core Arm Cortex M0+
Frequency	EU868 Version: 863MHz ~ 870MHz US915 Version: 902MHz ~ 928MHz
Antenna	LoRa : 3dBi External Antenna with Base
Graphics	Intel® UHD Graphics 600 (Frequency: 250 – 750MHz)
Memory	LPDDR4 8GB
Storage	Internal 512GB SSD
Wireless	Wi-Fi 802.11 a/b/g/n/ac @ 2.4/5 GHz HT160
Networking	Intel®226-V PCIe2.5GbE LAN, Supports Wake-On-LAN, Supports PXE
Audio	Microphone + headphone Combo Connector
USB	USB 2.0 Type-A x2, USB 3.1 Type-A x1, USB 3.1 Type-C x1
Video Interfaces	HDMI2.0a: Up to 4096x2160 @ 60Hz 24bpp / DP1.2a: Up to 4096x2160 @ 60Hz 24bpp
Expansion Slots	M.2(Key B, 2242/2280): SATA III, USB2.0, UIM; M.2 (Key M, 2242/2280): PCIe 2.0 ×4; Micro SD card Socket; SIM Card Socket; SATA III
Operating temperature	0°C～45°C
Storage temperature	-20°C～60°C
TPM	Built-in TPM 2.0
Power	DC Jack 5.5/2.1mm or Type-C PD; DC Jack input: 12-19V DC; Type-C input: 15V DC
Dimensions	130x120x50mm
Certifications	FCC, CE

Part List

SenseCAP M4	1
LoRa Antenna	1
User Manual	1
International Power Adapter	1
SenseCAP Sticker	2

Resource Links

- https://www.seeedstudio.com/SenseCAP-M4-Bundle.html

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