

Chipsee

CS-A76-BOX

Powered by Rockchip RK3588J - Performance and Reliability



The **CS-A76-BOX** is an efficient, fanless industrial box PC driven by the **Rockchip RK3588J** low-power processor.

It is part of Chipsee's broad BOX PC product family, offering **multiple CPU options across different platforms** to meet diverse performance and application requirements.

Its compact design with integrated brackets enables secure and straightforward mounting on any flat surface, including industrial cabinets and walls.

This unit is designed to thrive in **demanding settings** and offers a comprehensive range of connectivity options, ensuring versatility and reliability in harsh industrial and challenging outdoor environments.

Encased in specially engineered **aluminum housing with fins**, the CS-A76-BOX achieves **superior heat dissipation** through passive cooling. This innovative design obviates the need for internal fans, contributing to a quieter operation and reducing maintenance costs and efforts.

This makes the CS-A76-BOX an optimal choice for situations where a durable, low-maintenance, and noise-sensitive solution is required.

Technical Features

The **CS-A76-BOX**, powered by the **Rockchip RK3588J** processor, features a **Quad(4)-core Cortex-A76** (2.0GHz) and **Quad(4)-core Cortex-A55** (1.8GHz).

It offers **extensive connectivity**: a CAN bus interface, USB ports, dual LAN ports, RS232 and RS485 interfaces, and an HDMI output. For wireless communication, it includes a WiFi/Bluetooth module, with an optional 4G/LTE module.

The power supply has multiple protection mechanisms against over-current, over-voltage, surges, and reverse polarity, ensuring industrial safety and reliability.

Multiple Operating System Support

The unit comes preinstalled with **Debian 11** or **Buildroot Linux Qt 5.15**. Our dedicated team of software engineers has expertly crafted all necessary drivers to ensure seamless hardware compatibility across widely-used development tools.

If your project requires an operating system not on our list, please feel free to contact us, and we will create a customised version tailored to your specific needs.

Weight	1710 g
Dimensions	209 × 125 × 37.3 mm
Net Weight	900 g
CPU	ARM: Rockchip RK3588J
CPU Frequency	Quad(4)-core Cortex-A76 (2.0GHz) and Quad(4)-core Cortex-A55 (1.8GHz)
GPU	ARM Mali-G610 MC4. Up to 8K60 FPS video decoding, up to 8K30 FPS video encoding.
NPU	Neural network acceleration engine with 6Tops int8, supports Int4/8/16/FP16/BF16/TF32.
RAM	8GB LPDDR4
eMMC	64GB
Storage	TF Card, Supports up to 128GB SDHC
SSD	Not Supported
PCIe	Not supported
USB	1 x USB Type-C, 2 x USB 3.0 HOST
CAN	2 x CAN FD by default
GPIO	8 Channels, 4 Input, 4 Output
HDMI	1 x HDMI 2.0 Out, can be driven up to 4K 60FPS
RS232	2 x RS232 by default (Optional 6 x RS232 at most, include 1 debug port)
RS485	3 x RS485 by default
Ethernet	2 x RJ45, GbE
WiFi/BT	Built-in
4G	Optional
PoE	Not supported
Audio	3.5mm Audio In/Out Connector, Internal 2W Speaker
Buzzer	Onboard, driven by GPIO
RTC	High accuracy RTC with farad capacitor, can work 1 week after power off (default). High accuracy RTC with lithium coin battery, can work 3 years after power off (optional).
Current	290mA (max) at 15V
Power Input	9-30V DC, (supports optional 24V ignition signal)
Power Consumption	4.35W (max)
Working Temperature	-40°C to +85°C
Operating System	Buildroot, Debian
Mounting Method	VESA, PANEL