



CORDATUS AI BOX

01-ONX16-31F

Overview

Utilizing the NVIDIA Jetson Orin NX Module, the Cordatus Box AI offers an optimal solution for managing embedded IoT applications. Tailored for tasks like video analytics, robotics, and natural language processing, the Cordatus Box AI is adept at handling diverse applications. With a capacity to drive up to 100 TOPS, it delivers unparalleled AI performance and power efficiency, enhancing the capabilities of your projects significantly.

- Support NVIDIA Jetson Orin™ NX and Orin Nano™ module
- 2x USB 3.0 Ports (Type-A)
- 1x USB OTG (Micro)
- 1x 10/100/1000 Base-T RJ45
- 1x HDMI 2.0
- 1x 3.3V UART, 1x I2C bus, 2x SPI bus, 4x GPIO
- Wide input voltage range from 9V to 36V DC
- Operating Temperature -25°C ~ +85°C



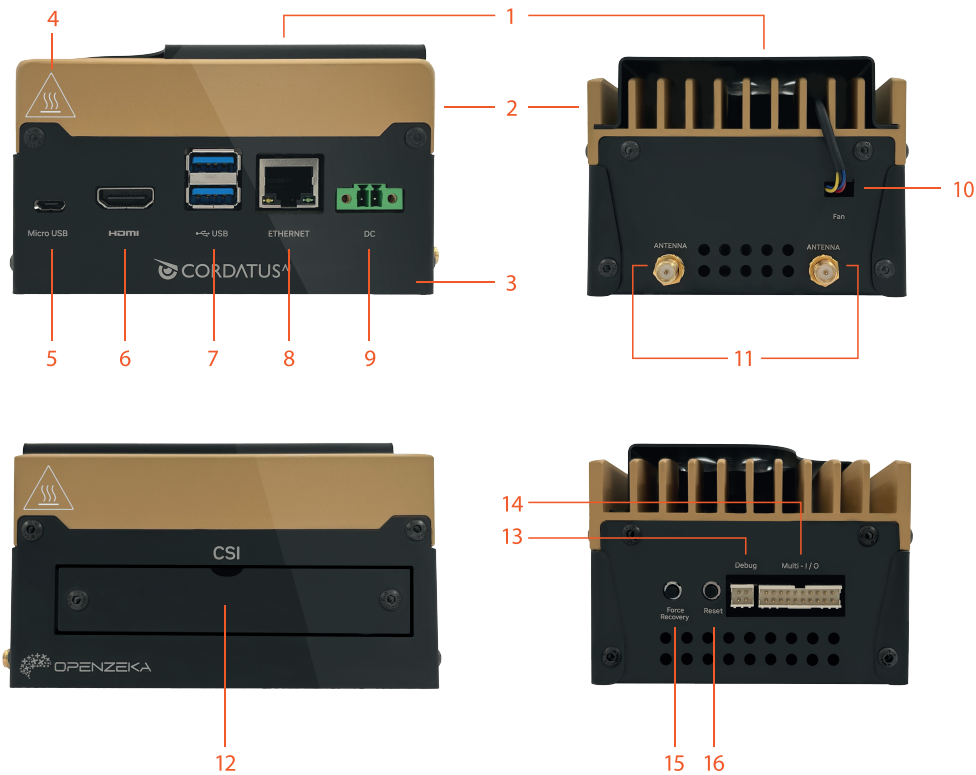
SPECIFICATIONS

Jetson Module	Jetson Orin Nano - Orin NX	AI Performance	100 TOPS (INT8)
GPU	1024-core NVIDIA Ampere architecture GPU with 32 tensor cores	CPU	8-core Arm® Cortex®-A78AE v8.2 64-bit CPU
Memory	4GB 64-bit LPDDR5 8GB / 16GB 128-bit LPDDR5	Dimensions	112mm(L) x 90mm(W) x 67mm(H)
MISC / IO Connector	1x 3.3V UART, 1x I2C bus 2x SPI bus, 4x GPIO	USB	2x USB 3.0 Ports (Type-A) 1x USB OTG (Micro)
DL Accelerator	2x NVDLA v2.0	Power Configuration	10W - 25W
Display Output	1x HDMI 2.0	Camera Inputs	2x MIPI CSI-2 15 Pin
Networking	1x 10/100/1000 Base-T RJ45	Wireless	1x M.2 E-Key - 2230
Storage	1x NVME M.2 M-Key SSD - 2280	Input Power	9V-36V DC Input
Operating Temperature	-25°C to +85°C	Weight	882g (Including Antenna)
Video Encode	1x 4K60 3x 4K30 6x 1080p60 12x 1080p30 (H.265) H.264, AV1	Video Decode	1x 8K30 2x 4K60 4x 4K30 9x 1080p60 18x 1080p30 (H.265) H.264, VP9, AV1



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Number	Name	Description
1	Fan	Active Cooling Airflow
2	Heatsink	Active Heatsink
3	Case	112mm(L) x 90mm(W) x 67mm(H) - 882g (Including Antenna)
4	Operating Temperature	-25°C to +85°C
5	Micro USB Port	USB 2.0 Micro-B
6	HDMI Port	HDMI (3840 x 2160 at 60Hz)
7	USB Port	2x USB 3.0 Ports (Type-A)
8	ETHERNET Port	GbE RJ-45
9	DC Port	Voltage Range 9V - 36V
10	Fan Connector	Fan Connector
11	Antenna Port	Antenna Port
12	CSI Port	2 Lane MIPI CSI-2, 15 pin FPC 1mm Pitch Connector
13	Debug Connector	1x UART for Debug
14	Multi - I / O Connector	1x 3.3V UART, 1x I2C bus, 2x SPI bus, 4x GPIO
15	Force Recovery Button	Button for Recovery Mode
16	Reset Button	System Reset Button