

# CORDATUS AI BOX

## 21-ONX16-21

## 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
- 4 x USB 3.2 Gen1(5G) type A
- 1 x RJ-45 GbE port
- 40 pin (1× UART, 2× SPI, 2×I2C, 1×I2S, 6× GPIO)
- Wide input voltage range from 9V to 24V DC
- Operating Temperature 0°C to +70°C
- Fanless Design

## SPECIFICATIONS

<b>Jetson Module</b>	Jetson Orin Nano - Orin NX	<b>AI Performance</b>	100 TOPS (INT8)
<b>GPU</b>	1024-core NVIDIA Ampere architecture GPU with 32 tensor cores	<b>CPU</b>	8-core Arm® Cortex®-A78AE v8.2 64-bit CPU
<b>Memory</b>	4GB 64-bit LPDDR5 8GB / 16GB 128-bit LPDDR5	<b>Dimensions</b>	120mm(L) x 92mm(W) x 90mm(H)
<b>MISC / IO Connector</b>	1x UART, 2x SPI 2x I2C, 1x I2S, 6x GPIOs	<b>USB</b>	1x USB 2.0 Micro-B for recovery 4 x USB 3.2 Gen 1 (5G) Type A
<b>DL Accelerator</b>	2x NVDLA v2.0	<b>Power Configuration</b>	10W - 25W
<b>Display Output</b>	1x HDMI 2.0	<b>Camera Inputs</b>	1x MIPI CSI-2 15 Pin
<b>Networking</b>	1x 10/100/1000 Base-T RJ45	<b>Wireless</b>	1x M.2 E-Key - 2230
<b>Storage</b>	1x NVME M.2 M-Key SSD - 2280	<b>Input Power</b>	9V-24V DC Input
<b>Operating Temperature</b>	0°C to +70°C	<b>Weight</b>	875g (Including Antenna)
<b>Video Encode</b>	1x 4K60   3x 4K30   6x 1080p60 12x 1080p30 (H.265) H.264, AV1	<b>Video Decode</b>	1x 8K30   2x 4K60   4x 4K30 9x 1080p60   18x 1080p30 (H.265) H.264, VP9, AV1

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Number	Name	Description
1	Heatsink	Passive Heatsink
2	Case	120mm(L) x 92mm(W) x 90mm(H) - 875g (Including Antenna)
3	HDMI Port	HDMI (3840 x 2160 at 60Hz)
4 - 5	USB Port	4x USB3.2 Gen1 (5G) type A
6	ETHERNET Port	GbE RJ-45
7	DC Port	Voltage Range 9V - 24V
8	Operating Temperature	0°C to +70°C
9	Multi - I / O Port	40-pin (1x UART, 2x SPI, 2x I2C, 1x I2S, 6x GPIO)
10	Micro USB Port	USB 2.0 Micro-B
11	Force Recovery Button	Button for Recovery Mode
12	Power Button	Button for Power
13	CSI Port	2 Lane MIPI CSI-2, 15 pin FPC 1mm Pitch Connector
14	Antenna Port	Antenna Port