

DS-015

Compact AI Player Powered by Jetson Orin Nano / Orin NX



Features

- Powered by Nvidia 6-core Arm® Cortex-A78AE v8.2 64-bit
- Multiple AI workloads up to 157 TOPS (INT8)
- Ultra-slim design with intelligent fan cooling
- Connectivity: 3 × USB 3.2 Gen 1 ports, 1 × USB Type-C (for download mode only)
- Display & Camera Support: HDMI 4K@60 output and GMSL camera interfaces

WISE-DeviceOn



Introduction

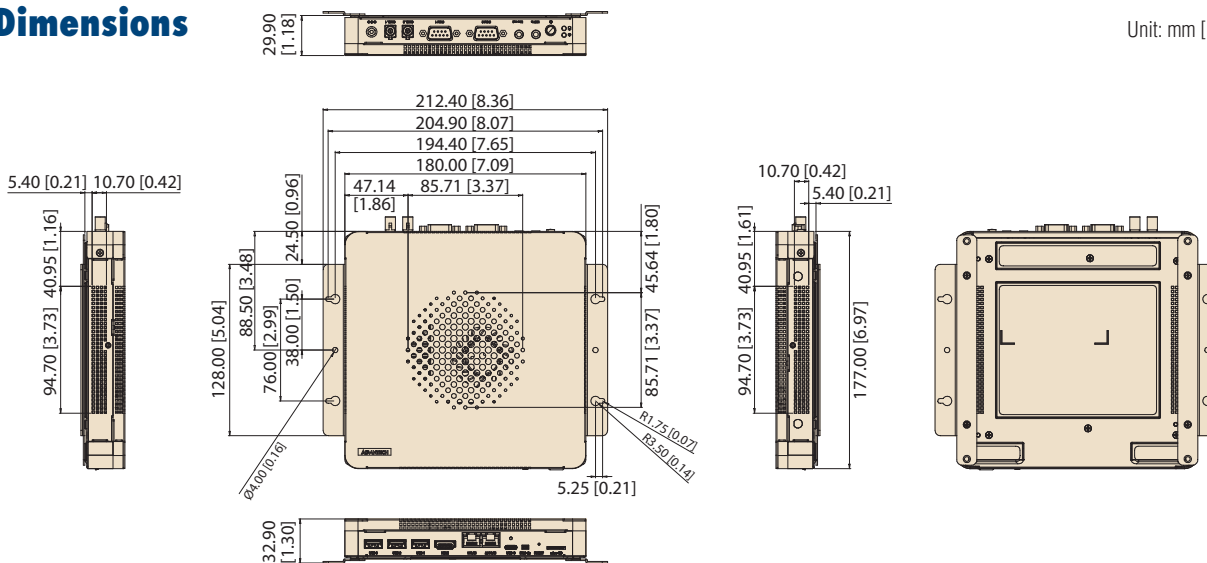
DS-015 is a slim Edge AI Box powered by NVIDIA Jetson Orin Nano & NX, featuring 4K HDMI display output and dual GMSL camera inputs. Designed for smart city and retail applications, it is an ideal solution for interactive AI systems and digital signage. With the NVIDIA Ampere architecture (512/1024-core GPU with 16 & 32 Tensor Cores), it delivers powerful performance for real-time AI inference at the edge.

Specifications

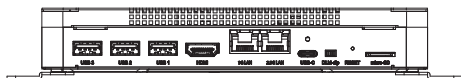
		DS-015VB-U0A1E	DS-015VB-U1A1E	DS-015VB-U2A1U	DS-015VB-U3A1U
Processor	Chipset	NVIDIA Jetson Orin Nano 4G	NVIDIA Jetson Orin Nano 8G	NVIDIA Jetson Orin NX 8G	NVIDIA Jetson Orin NX 16G
	CPU	Arm Cortex-A78AE (6 cores)	Arm Cortex-A78AE (6 cores)	Arm Cortex-A78AE (8 cores)	Arm Cortex-A78AE (8 cores)
Memory	Technology	4GB LPDDR5 4267 MT/s on board	8GB LPDDR5 4267 MT/s on board	8GB LPDDR5 8533 MT/s on board	16GB LPDDR5 8533 MT/s on board
	GPU	512-cores NVIDIA Ampere Architecture	1024-cores NVIDIA Ampere Architecture	1024-cores NVIDIA Ampere Architecture	1024-cores NVIDIA Ampere Architecture
AI Performance Reference	Tensor Cores	16 Tensor	32Tensor	32Tensor	32Tensor
	Super mode (Sparse)	34 TOPS	67 TOPS	117 TOPS	157 TOPS
Thermal Solution	Technology	Smart fan			
Display	Output	1 x HDMI1.4	1 x HDMI1.4	1 x HDMI2.0	1 x HDMI2.0
	HDMI Resolution	Nano: 4K UHD (3840x2160) @ 30Hz		NX: 4K UHD (3840x2160) @ 60Hz	
Ethernet	Controller	1G Realtek 8111 2.5G Intel I226V			
	Interface	2 x RJ45			
I/O Interfaces	Audio	1 x Line-out; 1 x Mic-in			
	USB	3 x USB 3.2 x Gen1; 1 x USB type C for download mode only			
	Serial Port	1 x RS232, 1 x RS-232/422/485.			
	LED Indicators	1 x Power, 1 x SSD Access			
	GMSL	2 x FAKRA connectors for GMSL			
	CAN Bus	CAN A/B (By jumper setting, shared with debug port)			
	SDHC	1 x SD slot			
Expansion	M.2	1 x M.2 M-Key 2280 (PCIe x 4) 1 x M.2 M-Key 2242 (PCIe x 1) 1 x M.2 E-Key 2230 (PCIe x1/USB 2.0)			
	Storage	1 x M.2 M-Key 2280 (built-in 128G SSD), 1 x M.2 M-Key 2242			
Power	Power Type	AT/ATX			
	Input Voltage	12-24V			
Trusted Platform Module	TPM2.0	TPM 2.0 (Nuvoton NPCT760AABYX)			
Physical Characteristics	Mounting	Wall Mount			
	Dimension	180 x 177 x 29.9 mm			
	Weight	0.9 kg			
Environment	Operating Temperature	0~40°C			
	Relative Humidity	95% @ 40 °C (non-condensing), operating			
Operating System	Operating System	Linux Ubuntu 22.04 with Jetpack version 6.2			
Certification	EMC	CE/FCC Class B, BSMI, UKCA			
	Safety	UL, CB, BSMI			

Dimensions

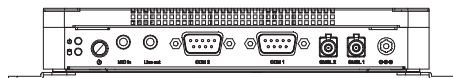
Unit: mm [inch]



Front View



Rear View



Ordering information

Part No.	CPU	Memory	Storage	HDMI	USB 3.2 Gen1	OS	Power Input	Origin
DS-015VB-U0A1E	Jetson Orin Nano	4G LPDDR5 on board	M.2 2280 128G	1	3	Linux Ubuntu 22.04	12-24V	China
DS-015VB-U1A1E	Jetson Orin Nano	8G LPDDR5 on board	M.2 2280 128G	1	3	Linux Ubuntu 22.04	12-24V	China
DS-015VB-U0A1U	Jetson Orin Nano	4G LPDDR5 on board	M.2 2280 128G	1	3	Linux Ubuntu 22.04	12-24V	Taiwan
DS-015VB-U1A1U	Jetson Orin Nano	8G LPDDR5 on board	M.2 2280 128G	1	3	Linux Ubuntu 22.04	12-24V	Taiwan
DS-015VB-U2A1U	Jetson Orin NX(super mode)	8G LPDDR5 on board	M.2 2280 128G	1	3	Linux Ubuntu 22.04	12-24V	Taiwan
DS-015VB-U3A1U	Jetson Orin NX(super mode)	16G LPDDR5 on board	M.2 2280 128G	1	3	Linux Ubuntu 22.04	12-24V	Taiwan

Packing List

Part Number	Description
-	1 x DS-015
96PSA-A65W19V1-3	ADP A/D 100-240V 65W 19V C6 DC PLUG 180° 62368
1960057740T002	2 x Wall Mount brackets and screws
SQF-C8MV2-128GDEDM	1 x 128G build-in SSD

Storage

Part Number	Description
SQF-C8MV2-128GDEDM	SQF M.2 2280 720-D 128G 3D TLC BiCS5 (-20~85°C)
SQF-C4M24-512GDEDE	SQF M.2 2242 720-D 512G 3D sTLC BiCS5 (-40~85°C)

Power Cord

Part Number	Description
1700001524	3-pin power cord (US)
170203183C	3-pin power cord (EU)
170203180A-01	3-pin power cord (UK)
1700008921	3-pin power cord with PSE (Japan)
1700019146	3-pin power cord (CCC)
1700018553	3-pin power cord (AU)
1700024849-01	3-pin power cord (TW)

Optional Items

P/N	Remark
1960056999T301	DS-015 VESA Mount
EWM-W179M201E	802.11ax/ac/b/g/n M.2 2230 Key A/E solution based on RTL8852CE chipset (2T2R)
1751000648-01	RF Cable/ 1.13/ 10mm/ Black/ RP-SMA femal
1751000635-01	RF Cable/ 1.13/ 20mm/ Black/ RP-SMA femal
1751000460-01	WiFi 6E Dipole ANTENNA 2400-2500 / 5150-5850 / 5925-7125 MHz
96ICAM-301	GMSL camera
1700033535-01	USB Type-C to USB Type-A Cable