

AIR6N0-C-MB NX HDMI2.0

AI Edge for 4K60 HDMI2.0

Features

- Powered by NVIDIA® Jetson Orin™ NX up to 100 / 70 TOPS
- Business Card Size
- 1×HDMI2.0 In & Loop
- 1×USB3.2 Gen2
- 1×Mini DisplayPort



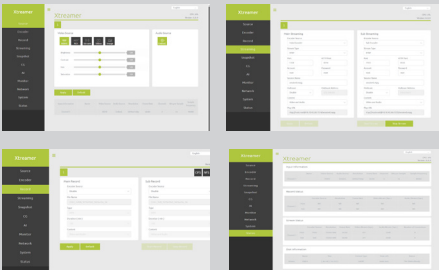
Specifications

System		
CPU	NVIDIA Jetson Orin™ NX 8GB 6-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 1.5MB L2 + 4MB L3	NVIDIA Jetson Orin™ NX 16GB 8-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 2MB L2 + 4MB L3
GPU	1024-Core NVIDIA Ampere Architecture GPU with 32 Tensor Cores	
AI Performance	NVIDIA Jetson Orin™ NX 8GB 70 TOPS	NVIDIA Jetson Orin™ NX 16GB 100 TOPS
System Memory	NVIDIA Jetson Orin™ NX 8GB 8GB LPDDR5	NVIDIA Jetson Orin™ NX 16GB 16GB LPDDR5
Interface		
Storage	Supports External NVMe 1×Micro SD Card Slot	
Display Interface	1×Mini DP1.4	
Ethernet	1×RJ45 for 10/100/1000Mbps Ethernet DHCP Client	
Expansion Slot	M.2 1×M.2 2230 M Key PCIe Gen4×2 Slot 1×M.2 2230 E Key PCIe Gen4×1 Slot	
USB	1×USB3.2 Gen2 (Type-C)	
MIPI	8×MIPI CSI-2 Lanes (D-PHY 2.1, 2×4 MIPI Lanes, Support MIPI Camera, Capture Card)	
Peripheral Communication	14 Pin Header 1×USB2.0 4×GPIO 1×UART 1×I2C 2×6 Pin Header 3×GPIO 1×RS485 1×I2C 8 Pin Phoenix Connector 3×GPIO 1×RS232 1×I2C	
Misc. Features	Firmware Upgradable	

Key Points

Video Feature	
Video Input	1×HDMI2.0
Video Output	1×HDMI2.0 (Loop)

Add-On Cards / SDK / Software

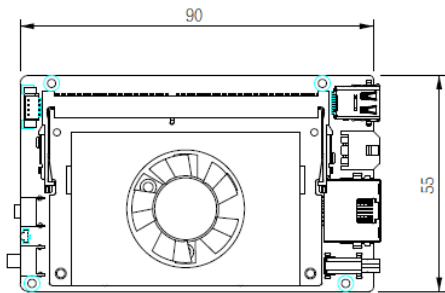
Video Feature		
Video Encode	AV1 (UHP)	1×4K60 3×4K30 6×1080p60 12×1080p30
	H.265 (UHP)	1×4K60 3×4K30 6×1080p60 12×1080p30
	H.264 (UHP)	1×4K60 2×4K30 5×1080p60 11×1080p30
Video Decode	AV1 (Main Profile)	1×8K30 2×4K60 4×4K30 9×1080p60 20×1080p30
	H.265 (Main, Main10)	1×8K30 2×4K60 4×4K30 9×1080p60 18×1080p30
	H.264 (Baseline, Main, High)	1×4K60 2×4K30 5×1080p60 11×1080p30
	VP9 (Profile 0, Profile 2)	1×4K60 3×4K30 7×1080p60 15×1080p30
SDK		
QCAP	Capture	High Performance Renderer Image Snapshot Deinterlace, Alpha Blending Engine Auto Signal Detection 2D/3D Video, Audio and VANC Streams Capture
	Record	Encrypt / Sync / Clone / Recording Time-Shifting / Rewind / Pre-Event / Recording Multi-Streams (3D) Recording Animation Transition Effect Video Cropping, Scaling and Alpha Blending Engine
	Stream	2D/3D Universal Stream Client 2D/3D Multi-Streams Stream Server RTSP, RTMP, HLS, SRT, TS, WebRTC. NDI-HX (*), Dante AV-H (*) Animation Transition Effect Video Cropping, Scaling and Alpha Blending Engine *Separate License Required
QDEEP	AI SDK Integrated Multiple Algorithms and Deep-Learning Models in Various Fields of Applications	Face Recognition Objects Detection Objects Segment Optical Character Recognition License Plate Recognition Customizable Video AI Functions Upon Request
Software (Optional)		
Xtreamer	Web Based User Interface	
	Encode / Decode	
	AV1, H.26X	
	Color Format Adjust	
	444 / 422 / 420, 10Bit / 8Bit Select	
	Record	
	MP4, TS	
	Stream / Network	
	RTSP, RTMP, HLS, SRT, TS, WebRTC. NDI-HX (*), Dante AV-H (*)	
	*Separate License Required	

Environment

Development Environment	
OS	Ubuntu: 20.04
Kernel	5.10.104-tegra or Higher
BSP	Linux for Tegra(L4T) R35.3.1 or Higher
SDK	JetPack 5.1.1 or Higher
Environment	
Power Supply	DC input : 24V
Power Consumption	TBA
Operating Temperature	Standard Version: 0~60 ° C with Airflow
Storage Temperature	-20~80 ° C

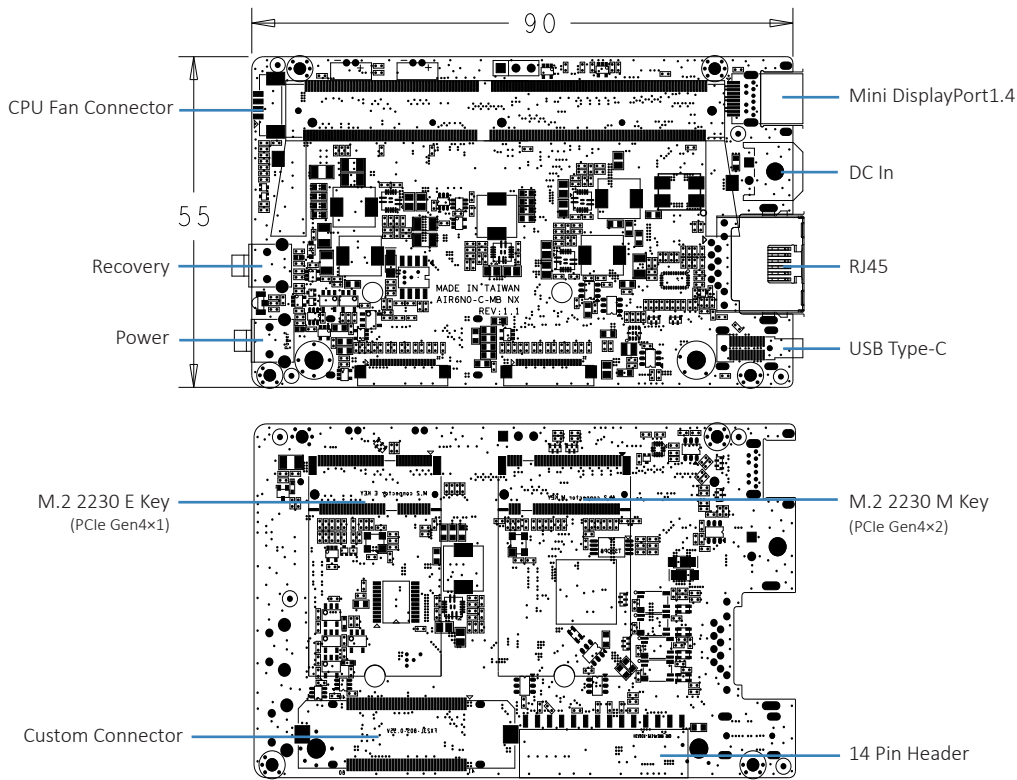
Mechanical

- Dimension of main Board: 90mm×55mm
- Weight: TBA



I/O Layout

- Carrier Board



- I/O Board

