

Pixel AGX

Medical AI Computer with 10" Touch Screen

Features

- Powered by NVIDIA Jetson AGX Orin™ or NVIDIA Jetson AGX Orin™ Industrial (NVIDIA Jetson IGX Orin™ 500)
- 10" Touch Screen
- Medical Grade IEC 60601-1
- 2×M.2, Gen 4×2 M Key / Gen 4×1 M Key
- 2×USB3.2 / 1×USB2.0
- UART / GPIO



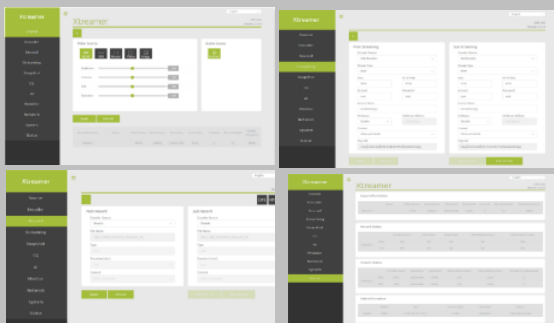
Specifications

System			
CPU	NVIDIA Jetson AGX Orin™ 32GB 8-core Arm® Cortex®-A78AE v8.2 64-Bit CPU 2MB L2 + 4MB L3	NVIDIA Jetson AGX Orin™ 64GB 12-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 3MB L2 + 6MB L3	NVIDIA Jetson AGX Orin™ Industrial 12-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 3MB L2 + 6MB L3
GPU	NVIDIA Jetson AGX Orin™ 32GB 1792-Core NVIDIA Ampere Architecture GPU with 56 Tensor Cores	NVIDIA Jetson AGX Orin™ 64GB 2048-Core NVIDIA Ampere Architecture GPU with 64 Tensor Cores	NVIDIA Jetson AGX Orin™ Industrial 2048-Core NVIDIA Ampere Architecture GPU with 64 Tensor Cores
AI Performance	NVIDIA Jetson AGX Orin™ 32GB 200 TOPS	NVIDIA Jetson AGX Orin™ 64GB 275 TOPS	NVIDIA Jetson AGX Orin™ Industrial 248 TOPS
System Memory	NVIDIA Jetson AGX Orin™ 32GB 32GB LPDDR5	NVIDIA Jetson AGX Orin™ 64GB 64GB LPDDR5	NVIDIA Jetson AGX Orin™ Industrial 64GB LPDDR5 (+ECC)
Interface			
Storage	Supports External NVMe 1×SD Card Slot		
Display Interface	1×HDMI2.0		
Ethernet	1×RJ45 for 10/100/1000Mbps Ethernet DHCP Client		
Expansion Slot	M.2 1×M.2 2280 M Key PCIe Gen4×2 Slot 1×M.2 2280 M Key PCIe Gen4×1 Slot		
USB	2×USB3.2 Gen2 (Type-A) 1×USB2.0 (Type-A)		
MIPI	16×MIPI CSI-2 Lanes (D-PHY 2.1, 4×4 3×4+2×2 2×4+4×2 1×4+5×2 6×2 MIPI Lanes, Support MIPI Camera, Capture Card)		
Audio	1×3.5mm Line In 1×3.5mm Line Out		
Peripheral Communication	D-Sub Connector 1×RS232 1×UART Phoenix Connector 4×GPIO 1×CAN Bus (Pin Header)		
Misc. Features	Firmware Upgradable		

Key Points

Screen Feature	
Size	10 Inch
Resolution	1280×800

Add-On Cards / SDK / Software

Video Feature			
Video Encode	NVIDIA Jetson AGX Orin™ 32GB: AV1 (UHP) 1x4K60 3x4K30 H.265 (UHP) 1x4K60 3x4K30 H.264 (UHP) 1x4K60 2x4K30	NVIDIA Jetson AGX Orin™ 64GB AV1 (UHP) 2x4K60 4x4K30 H.265 (UHP) 2x4K60 4x4K30 H.264 (UHP) 1x4K60 3x4K30	NVIDIA Jetson AGX Orin™ Industrial AV1 (UHP) 1x4K60 3x4K30 H.265 (UHP) 1x4K60 3x4K30 H.264 (UHP) 1x4K60 3x4K30
Video Decode	NVIDIA Jetson AGX Orin™ 32GB AV1 (Main Profile) · 1x8K30 2x4K60 4x4K30 H.265 (Main, Main10) · 1x8K30 2x4K60 4x4K30 H.264 (Baseline, Main, High) · 1x4K60 2x4K30 VP9 (Profile 0, Profile 2) · 1x4K60 3x4K30	NVIDIA Jetson AGX Orin™ 64GB AV1 (Main Profile) 1x8K30 3x4K60 6x4K30 H.265 (Main, Main10) 1x8K30 3x4K60 7x4K30 H.264 (Baseline, Main, High) 1x4K60 3x4K30 VP9 (Profile 0, Profile 2) 1x8K30 3x4K60 6x4K30	NVIDIA Jetson AGX Orin™ Industrial AV1 (Main Profile) 1x8K30 3x4K60 6x4K30 H.265 (Main, Main10) 1x8K30 3x4K60 7x4K30 H.264 (Baseline, Main, High) 1x4K60 3x4K30 VP9 (Profile 0, Profile 2) 1x8K30 3x4K60 6x4K30
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 (*), Full NDI (*), 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 (*), Full NDI (*) 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 : 9~24V
Power Consumption	TBA
Operating Temperature	Standard Version: 0~60°C with Airflow
Storage Temperature	-20~80 °C

I/O Layout

Case

The diagram illustrates the I/O layout of the device case. The top-left view shows the front panel with a Power jack, USB2.0 & USB3.0 ports, and an SD Card Slot. The top-right view shows the side of the case with a series of ventilation holes. The bottom view shows the rear panel with various ports: 1x3.5mm Line In and 1x3.5mm Line Out, Ground Terminal, DC In, Ethernet, 4xGPIO, RS232 & UART, USB3.2Gen2, and HDMI Out.

Compatible with AIR6N0-C Daughter Board
 For other AIR6N0-C Daughter Board models, please visit our website <https://www.yuan.com.tw/product-info/88>

The four daughter board models are:

- HDMI2.0
- 4xHDMI
- 12G-SDI
- Quad Link 12G-SDI