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	64GB eMMC 5.1 (On NVIDIA Jetson AGX Orin™ Module) 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		

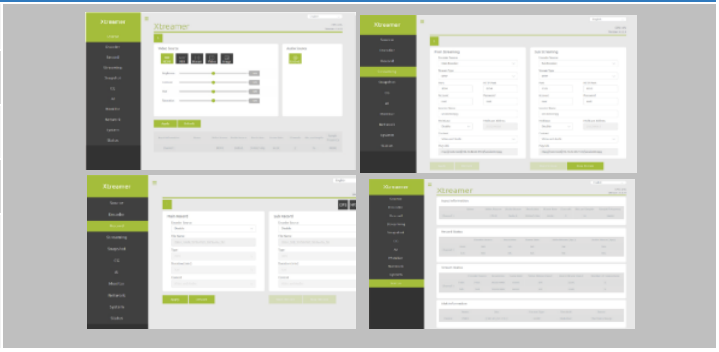
Key Points

Screen Feature	
Size	10 Inch
Resolution	1280×800

Add-On Cards / SDK / Software

Video Feature			
Video Encode	NVIDIA Jetson AGX Orin™ 32GB: AV1 (UHP) 1×4K60 | 3×4K30 H.265 (UHP) 1×4K60 | 3×4K30 H.264 (UHP) 1×4K60 | 2×4K30	NVIDIA Jetson AGX Orin™ 64GB AV1 (UHP) 2×4K60 | 4×4K30 H.265 (UHP) 2×4K60 | 4×4K30 H.264 (UHP) 1×4K60 | 3×4K30	NVIDIA Jetson AGX Orin™ Industrial AV1 (UHP) 1×4K60 | 3×4K30 H.265 (UHP) 1×4K60 | 3×4K30 H.264 (UHP) 1×4K60 | 3×4K30
Video Decode	NVIDIA Jetson AGX Orin™ 32GB AV1 (Main Profile) · 1×8K30 | 2×4K60 | 4×4K30 H.265 (Main, Main10) · 1×8K30 | 2×4K60 | 4×4K30 H.264 (Baseline, Main, High) · 1×4K60 | 2×4K30 VP9 (Profile 0, Profile 2) · 1×4K60 | 3×4K30	NVIDIA Jetson AGX Orin™ 64GB AV1 (Main Profile) 1×8K30 | 3×4K60 | 6×4K30 H.265 (Main, Main10) 1×8K30 | 3×4K60 | 7×4K30 H.264 (Baseline, Main, High) 1×4K60 | 3×4K30 VP9 (Profile 0, Profile 2) 1×8K30 | 3×4K60 | 6×4K30	NVIDIA Jetson AGX Orin™ Industrial AV1 (Main Profile) 1×8K30 | 3×4K60 | 6×4K30 H.265 (Main, Main10) 1×8K30 | 3×4K60 | 7×4K30 H.264 (Baseline, Main, High) 1×4K60 | 3×4K30 VP9 (Profile 0, Profile 2) 1×8K30 | 3×4K60 | 6×4K30

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℃ with Airflow
Storage Temperature	-20~80 ° C

I/O Layout

- Case