

# VPP6N0 AGX

Highly Integrated AI Server, Provide 275 TOPS and Expandability

YUAN  
Visualize Intelligent Planet

## Features

- Up to 275 TOPS AI Performance
- 1xPCIe Gen3x8, 1xPCIe Gen3x4
- 1xM2 M Key / 1xM2 E Key / 1xM2 B Key
- 2xUSB3.2 Gen2
- CANBus / UART / I2C / SPI



## 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
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
AI Performance	NVIDIA Jetson AGX Orin™ 32GB 200 TOPS	NVIDIA Jetson AGX Orin™ 64GB 275 TOPS
System Memory	NVIDIA Jetson AGX Orin™ 32GB 32GB LPDDR5	NVIDIA Jetson AGX Orin™ 64GB 64GB LPDDR5
Interface		
Storage	64GB eMMC 5.1 ( On NVIDIA Jetson AGX Orin™ Module)	
Display Interface	2xHDMI2.0 1xDP <b>*Select 2 Video Output Port at Same Time</b>	
Ethernet	2xRJ45 for 10/100/1000Mbps Ethernet DHCP Client	
Expansion Slot	PCIe 1xPCIe Gen3x4 Slot 1xPCIe Gen3x8 Slot  M2 1xM2 2230 E Key PCIe Gen3x1/USB2.0/SDIO Slot 1xM2 2280 M Key PCIe Gen3x4 Slot 1xM2 3042 B Key USB3.2 Gen2 ( 10G ) Slot	
USB	2xUSB3.2 Gen2 ( Type-A ) 1xUSB3.2 Gen1 ( Pin Header ) 1xUSB3.2 Gen1 ( Pin Header, Contains USB3.0 Signal Only) 2xUSB2.0 ( Type-A )	
MIPI	8xMIPI CSI Lanes ( Support MIPI Camera, Capture Card )	
Audio	1x3.5mm Line In 1x3.5mm Line Out	
Perherial Communication	1xUART ( Pin Header ) 3xGPIO ( Pin Header ) 2xCAN Bus ( Pin Header ) 2xI2C ( Pin Header ) 1xSPI ( Pin Header )	
Misc. Features	Firmware Upgradable AutoPower ( Pin Header ) Front Panel Control Button ( Compatible with Stream Capture Pro )	

## Add-On Cards / SDK / Software

Video Feature				
Capture Card ( Optional )	PCIe Model	Interface	Max. Resolution	Capture / Preview 4:2:2 10Bit P210 4:2:0 10Bit P010 4:4:4 8Bit YV24 4:4:4 8Bit RGB32 / 24 4:2:2 8Bit YUY2 4:2:0 8Bit YV12, NV12
	SC710N4T HDMI2.0	2×HDMI2.0	4096×2160p@60/50fps	
	SC710N4T 12G-SDI	2×12G-SDI	4096×2160p@60/50fps	
	SC420N16 TVI / AHD	16×TVI / AHD	1920×1080p@30/25fps	
	SC420N8 GMSL2	8×GMSL2	1920×1080p@60/45/30fps	
	SC410N4 HDMI	4×HDMI	1920×1080p@60/50fps	
	SC410N4 6G-SDI	4×6G-SDI	1920×1080p@60/50fps	
	M2 Model	Interface	Max. Resolution	
	SC710N1 M2 HDMI2.0	HDMI2.0	4096×2160p@60/50fps	
	SC710N1 M2 12G-SDI	12G-SDI	4096×2160p@60/50fps	
SC400N1 M2 HDV	1×DVI-I, 1×YPbPr, 1×VGA	1920×1080p@60/50fps		
Video Encode	NVIDIA Jetson AGX Orin™ 32GB		NVIDIA Jetson AGX Orin™ 64GB	
	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		AV1 ( UHP ) · 2×4K60   4×4K30   8×1080p60   16×1080p30 H.265 ( UHP ) · 2×4K60   4×4K30   8×1080p60   16×1080p30 H.264 ( UHP ) · 1×4K60   3×4K30   7×1080p60   14×1080p30	
Video Decode	NVIDIA Jetson AGX Orin™ 32GB		NVIDIA Jetson AGX Orin™ 64GB	
	AV1 ( Main Profile ) · 1×8K30   2×4K60   4×4K30   7×1080p60   15×1080p30 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		AV1 ( Main Profile ) · 1×8K30   3×4K60   6×4K30   9×1080p60   18×1080p30 H.265 ( Main Main10 ) · 1×8K30   3×4K60   7×4K30   11×1080p60   22×1080p30 H.264 ( Baseline, Main, High ) · 1×4K60   3×4K30   6×1080p60   13×1080p30 VP9 ( Profile 0, Profile 2 ) · 1×8K30   3×4K60   6×4K30   9×1080p60   18×1080p30	
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			



SC710N4T HDMI2.0



SC710N4T 12G-SDI



SC420N16 TVI / AHD



SC420N8 GMSL2



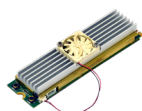
SC410N4 HDMI



SC410N4 6G-SDI



SC710N1 M2 HDMI2.0



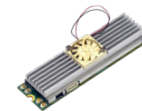
SC710N1 M2 12G-SDI



SC400N4 M2 TVI/AHD



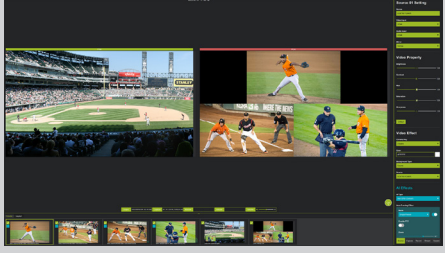
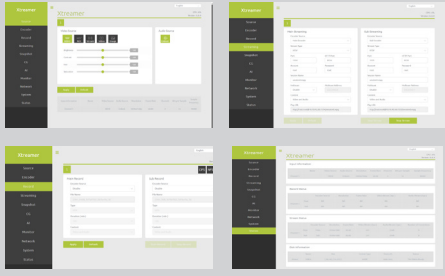
SC400N4 M2 HDMI



SC400N4 M2 SDI

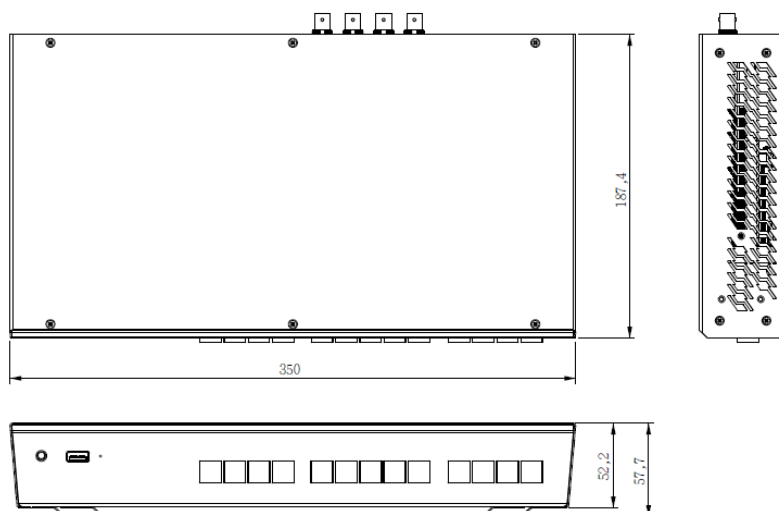


SC400N1 M2 HDV

Software ( Optional )		
Stream Catcher Pro	Capture Auto Signal Detection Deinterlace, OSD, Color Adjustment Image Snapshot Animation Transform Effect for PGM	
	Record AV1, H.26X MP4, TS Multi-Stream Recording Schedule Recording	
	Stream Multi-Streams Stream Server RTSP, RTMP, HLS, SRT, TS, WebRTC. NDI-HX (*), Dante AV-H (*) <b>*Separate License Required</b>	
Xstreamer	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 (*) <b>*Separate License Required</b>	
Development Environment		
OS	Ubuntu: 20.04	
Kernel	5.10.104-tegra or Higher	
BSP	Linux for Tegra(L4T) R35.1 or Higher	
SDK	JetPack 5.0.2 or Higher	
Environment		
Power Supply	DC input : 19V	
Power Consumption	TBA	
Operating Temperature	0~60 ° C	
Storage Temperature	-20~80 ° C	

## Mechanical

- Dimension of case: 350mm×187.4mm×51.4mm ( 57.7mm )
- Dimension of main Board: 181.5mm×167mm
- Weight: TBA



\* All registered trademarks are the property of their owners. The photo is for reference only.

\* Technology License Patent Royalty. Supplier ( YUAN Technology Ltd. ) as an OEM vendor is not responsible for any royalties applied to the Models and collected by any patent or trade mark holders or his exclusive, non-exclusive.

Licensees or representatives such as MPEGLA, Dolby, Thomson, Sisvel, H.264, MPEG4 and any other natural or legal person. All concerning royalties of patents and trade marks will be paid or negotiated with the above mentioned owner by you. In case of any patent or trademark infringement you are responsible for all necessary processes and costs. You accept and acknowledge that all prices of Models offered by supplier are exclusive of any royalties, charges or license fees for any patents in any countries or areas.

