# Shape Tomorrow's Cities with Edge Al

Enabling Smart Manufacturing and Transportation with Intelligent Industrial Computers

Edge AI Platform | Embedded Computer | In-Vehicle System | IoT Gateway





# **Accelerate Your Products Time-to-Market**

## Intelligent edge devices for all your IoT needs



With over 30 years of experience, Acrosser delivers advanced IPC solutions to meet growing demands for innovative edge devices. Our AI-enabled hardware ensures seamless integration, high performance, and scalability, helping you build market-ready products faster while focusing on innovation.

## Edge computing solutions for in-vehicle systems



Since 1995, EverFocus has led in smart security and Al-powered solutions, offering products tailored to AloT needs. Our edge Al technology enables real-time data processing, enhanced safety, and optimized performance in smart security, vehicles, and smart cities, accelerating your journey from concept to deployment.

# **NVIDIA Jetson Series**

The NVIDIA Jetson series delivers exceptional GPU performance in a compact form factor, designed for durability and long-lasting reliability - ideal for demanding AI and graphical workloads in various environments.



Orin Nano 20-40 TOPS



**Orin NX** 70-100 TOPS



AGX Orin 200-275 TOPS



AGX Xavier 30-32 TOPS



X86 Intel Platforms

Our x86 Intel platforms support leading AI frameworks, delivering optimized inference with Intel Deep Learning Boost. Scalable from Intel Atom® to Xeon®, they enable hybrid AI with MXM 3.1 Type A/B form factor GPU module and Hailo-8 integration for enhanced performance. Built-in security features, such as Intel® SGX and Boot Guard, ensure data protection. With Intel's tools like OpenVINO and OneAPI, our solutions simplify AI deployment and accelerate time-to-market. Perfect for complex edge AI applications.



# Let's bring your innovative ideas to life— Partner with us for faster, smarter solutions today.



# **ARM-based Smart Gateway**

arm

Acrosser's ARM-based smart protocol gateways deliver energy efficiency, cost-effectiveness, and real-time data processing for IoT applications. Their rugged design makes them ideal for industrial environments. With seamless compatibility for popular IoT protocols, these gateways integrate easily into existing networks, offering a reliable, scalable solution for edge deployments across industries like smart cities, manufacturing, and automation.



# Application

# Security monitoring and real-time alarms for workplace safety

Our IoT gateways offer real-time connectivity to monitor equipment safety and prevent hazards. The SPG-3352Z collects data from pressure gauges, triggering alerts when thresholds are exceeded. This enables early risk detection, ensuring safety issues are addressed before escalation.

#### Key feature

Multiple I/O interface connections for data collection



## Defect detection on a production line

Production lines typically rely on manual defect inspection, but AI enhances precision and efficiency. The IES-3030 transmits camera data to the AIS-5530 for rapid defect detection, while the EAC-50N with NVIDIA AI NVR monitors workplace safety, improving operational efficiency.

#### Key feature

EAC-50N features 5 x PSE, supporting multiple camera feed. AIS-5530 delivers versatile connectivity suitable for a wide range of industrial applications.



## Enhancing fleet efficiency and road safety

Powered by the NVIDIA Jetson Orin NX, EAR-30N integrates with sensors, cameras, and networks through GMSL2 camera support, CAN FD, and 4G/5G connectivity, ensuring real-time data processing, fast ethernet communication, and precise coordination for dynamic operations.

#### Key feature

HMTD Base-T1 Ethernet port for solid states 3D LiDAR x 4/8, radar, and camera



# Selection guide

# **NVIDIA**

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Model Name	EAC-10N	EAC-30N	Preliminary EAC-50N	Preliminary EAC-70N	Preliminary EAR-30N	eNVP-JAO-Al eNVP-JAX-Al
Platform	NVIDIA® Jetson Orin™ NX  / NVIDIA® Jetson Orin™ Nano			NVIDIA® Jetson AGX Orin™	NVIDIA® Jetson Orin <sup>™</sup> NX	NVIDIA® Jetson AGX Orin NVIDIA® Jetson AGX Xavier
Al performance	Up to 100 TOPS / Up to 40 TOPS			Up to 275 TOPS	Up to 100 TOPS	Up to 275 TOPS / Up to 32 TOPS
Ethernet / PoE	1 x GbE LAN	•1 x GbE LAN •1 x Fast Ethernet	<ul> <li>1 x GbE LAN, PD 60W</li> <li>1 x GbE LAN, PSE 30W,</li> <li>DC Mode: 4 x GbE LAN, PSE</li> <li>1 x GbE LAN</li> </ul>	•2 x GbE LAN •1 x 10GbE LAN	<ul> <li>8 x 1G Base-T1 Ethernet ports</li> <li>3 x M12 X-coded GbE Ethernet ports</li> </ul>	•1 x 10GbE LAN •1 x GbE LAN •DC Mode: 8 x 10/100 MbE •PSE Max 120W
1/0	•1 x HDMI 2.0-Out •2 x USB 3.2 Gen1 type A •2 x RS-232/485 switchable	•1 x HDMI 2.0-Out •4 x USB 3.1, Type-A •1 x RS-485 •1 x CAN-FD	•1 x HDMI 2.0-Out •4 x USB 3.1, Type-A •2 x RS-485 •1 x CAN bus	•1 x HDMI 2.0-Out •4 x USB 3.2, Type-A •1 x USB Type-C •2 x RS-485 •1 x CAN bus	•1 x HDMI 2.0a/b •4 x USB 3.2 Gen1 type A, 1 x micro USB •1 x 48pin/1 x 32pin CMC lockable connector •4 x GMSL 2 camera FAKRA Z code •2 x FAKRA C code connector for Wi-Fi •3 x Max. FAKRA D coded connector for 4G/5G	•1 x HDMI 2.0-Out •2 x USB 3.1, Type-A •2 x USB 2.0, Type-A •1 x RS-485 •1 x RS-232 •8 x GPIO
Expansion	•1 x M.2 E-Key 2230 •1 x M.2 M-Key 2242 •1 x MIPI CSI-2 with FPC connector	•1 x M.2 M-Key 2280 •1 x M.2 E-Key 2230 •1 x M.2 B-Key 3052	•1 x M.2 M-Key 2280 •1 x M.2 E-Key 2230 •1 x M.2 B-Key 3042/3052	•1 x M.2 E-Key 2230 •1 x M.2 B-Key 3052 •1 x MIPI CSI-2 Connector	•1 x M.2 M-Key 2280 •1 x M.2 E-Key 2230 •1 x M.2 B+M Key 3052	•1 x M.2 M-Key 2280 •1 x M.2 E-Key 2230 •1 x M.2 B-Key 3042/3052 •2 x 2.5" bay SSD
Power Requirement	9 ~ 36 VDC	9 ~ 36 VDC	9 ~ 36 VDC	9 ~ 36 VDC	9 ~ 36 VDC± 5%	9 ~ 55 VDC
Operating Temperature	-20 ~ 60 °C	-20 ~ 60 °C	-20 ~ 60 °C	-20 ~ 60 ℃	-20 ~ 60 °C	-20 ~ 60 °C

# ARM

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Model Name	SIG-C101	SIG-C302	SIG-M101	NEC-C501	SPG-M041	SPG-3352Z
CPU/MCU	NXP i.MX 93 NXP i.MX 8M Plus TI AM625 MediaTek MT8395	NXP i.MX 8M Plus	NXP i.MX 8M Plus	NXP i.MX 8M Plus	ST STM32F429	TI AM3352
Ethernet	1 x GbE LAN	2 x GbE LAN	2 x Gigabit Ethernet	6 x GbE LAN	2 x 10/100Mbs	2 x GbE LAN
Serial Port	2 x RS-232/422/485	2 x RS232/RS422/RS485	2 x RS232/RS422/RS485	2 x RS232/RS485	2 x RS232/RS485	1 x RS485
DI/DO	•2 x Digital Input •2 x Digital Output	-	_	•4 x Digital Input •4 x Digital Output	4 x Digital Input	-
USB	2 x USB 2.0	2 x USB 3.0	2 x USB 3.0	2 x USB 3.0	-	2 x USB 2.0
CAN Bus	1 x CAN-FD	2 x CAN-FD	2 x CAN-FD	-	-	-
Security	TPM 2.0	TPM 2.0	TPM 2.0	TPM 2.0	-	-
Expansion	•1 x Mini PCIE •1 x Micro SD Slot	•1 x M.2 B-Key •1 x Micro SD Slot •1 x SIM Card Slot	•1 x Mini PCIE •1 x Micro SD Slot •1 x SIM Card Slot	•1 x M.2 B-Key •1 x M.2 E-Key •1 x Micro SD Slot •1 x SIM Card Slot	•1 x Mini PCIE •1 x Micro SD Slot •2 x SIM Card Slot	•1 x Mini PCIE •1 x Micro SD Slot •1 x SIM Card Slot
Power Requirement	9 ~ 36 VDC	9 ~ 36 VDC	9 ~ 36 VDC	9 ~ 36 VDC	9 ~ 36 VDC	9 ~ 36 VDC
Operating Temperature	-20 ~ 70 °C	-20 ~ 70 °C	-20 ~ 70 °C	-20 ~ 70 °C	-20 ~ 70 °C	-20 ~ 70 °C

# **Selection guide**

## **Intel Edge Computer**

					-	Base
Model Name	IES-2031	IES-3030	IVS-5830	AIS-7000	AIS-5530	IES-5410
CPU	Intel® Processor N97	13th Gen Intel® Core™ i7/i5/i3/Celeron® Processor SoC	12th Gen Intel® Core™ i7/i5/i3/Celeron® Processor SoC	Intel 10th Gen Gen Xeon® Core i9/i7 Processor LGA1200 Socket Type *MAX 80W TDP CPU	Intel® 13th/12th LGA1700 Socket Type *Max. 65W TDPs under 180A	Intel® 11th Generation Core™ i7/i5/i3 Processor
AI performance	Hailo-8 AI module up to 26 TOPS		GPU MXM 3.1 Type A up to 35W (Arc A370M 56 TOPS (Int8) peak) (RTX A1000 6.66 TFLOPS peak FP32)		-	-
Ethernet	2 x 2.5 GbE LAN	•1 x GbE LAN •1 x 2.5 GbE LAN	•2 x GbE LAN •1 x 2.5 GbE LAN	•2 x GbE LAN •2 x GbE PoE LAN	2 x GbE LAN	•1 x GbE LAN •1 x 2.5 GbE LAN
1/0	•2 x USB 3.2Gen1 •2 x USB 3.2Gen2 •1 x HDMI 2.0b •1 x DP 1.2 •1 x DP 1.4 via USB Type C •2 x RS232/422/485	•2 x USB 3.2Gen1 •2 x USB 3.2Gen2 •1 x HDMI 2.0b •1 x DP 1.2 •1 x DP 1.4 via USB Type C •2 x RS232/422/485	•2 x RS-232/RS422/485 •4 x Type A USB3.2 Gen 2 •2 x Type A USB 2.0 •1 x Type C USB 3.2 •1 x HDMI, 1 x DP •2 x CAN Bus •2 x RS485, •2DI/2 DO, Terminal block	•4 x RS232/RS422/485 •6 x Type A USB 3.2 Gen2 •1 x VGA, 1 x DVI-D, 1 x HDMI •4 DI, 4DO •DB15 Type •Mic-in, Line-out	•4 x USB3.2 Gen 2 •2 x USB 3.2 Gen 1 •4 x USB 2.0 •2 x HDMI 2.0b •2 x DP 1.4a •2 x RS232/422/485 •4 x RS232	•1 x CAN •2 x RS-232/RS422/485 •2 x DB9 Type RS-232 •4 x Type A USB 3.2 Gen 2 •2 x DP •1 x HDMI •Mic-in, Line-out •16 x DIO
Expansion	•1 x M.2 2230 E-Key *Support Hailo-8 AI module A+E key •1 x M.2 2280 M-Key •1 x M.2 3052 B-Key	•1 x M.2 2230 E-Key *Support Hailo-8 AI module A+E key •2 x M.2 2280 M-Key •1 x M.2 3052 B-Key	•1 x M.2 M-key 2280 •1 x M.2 E-Key 2230 •2 x M.2 B-key 3052 •1 x MXM 3.1	•1 x PCI-e x16 •1 x PCI-e x4 •2 x mini PCI-e •1 x M.2 M Key 2280 •1 x M.2 B Key 3042	•1 x PCI-e x16 •1 x M.2 B Key 3042 •1 x M.2 E Key 2230	•1 x Half Size Mini PCI-e slot •1 x M.2 B key 3052 •1 x Nano SIM Slot
Power Requirement	12 VDC	12 VDC	9 ~ 55 VDC	9 ~ 55 VDC	12 ~ 36 VDC	12 ~ 24 VDC
Operating Temperature	-20 ~ 70 °C	-20 ~ 60 °C	-20 ~ 60 °C	-30 ~ 60/50/40 °C (35W/65W/80W TDP CPU)	0 ~ 60 °C	-20 ~ 55 ℃





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