



# Rugged Computer RSL A4AGX

Computer Vision Edge Unit with NVIDIA Jetson AGX Orin

Rugged Series



## Product Highlights

- 24/7 continuous operation
- IP67, IP69 protection, extended temperature range
- Power ignition controller
- High shock and vibration resistance
- Resistance to chemicals



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## Rugged Computer RSLA4AGX

 Order Code [RPC/RSLA4AGX32-B102S<sup>1</sup>](#) [RPC/RSLA4AGX32-C102S<sup>1</sup>](#)

Processor module / Performance		
NVIDIA Jetson <b>AGX Orin 32GB</b> 1792-core Ampere GPU with 56 Tensor Cores 8-core NVIDIA Arm® Cortex A78AE CPU	✓	✓
NVIDIA Jetson <b>AGX Orin 64GB</b> 2048-core Ampere GPU with 64 Tensor Cores 12-core NVIDIA Arm® Cortex A78AE CPU	see page 3	see page 3
NVIDIA Jetson <b>AGX Orin Industrial</b> 2048-core Ampere GPU with 64 Tensor Cores (ECC) 12-core NVIDIA Arm® Cortex A78AE CPU	on request <sup>1</sup>	on request <sup>1</sup>
Memory / Storage		
256-bit LPDDR5 RAM (204.8GB/s) soldered on module	32GB	32GB
eMMC 5.1 Flash Storage on board	64GB	64GB
M.2 2280 Key M socket (for 240GB – 2TB NVMe SSD)	1	1
Features		
Inertial measurement unit (IMU) STMicro ISM330DHCXTR	✓	✓
Real time clock (RTC), with battery backup Renata CR2477 (950 mAh)	✓	✓
Communication Interfaces		
DisplayPort 1.4a @ 8K60 <small>behind the service cover (rear)</small>	1	1
Internal USB version 2.0 <small>behind the service cover (rear), for device flashing and SSH access only</small> (micro USB Type AB )	1	1
USB version 2.0 <small>behind the service cover (rear)</small> (Type A)	2	2
USB version 3.1 (5 Gbit/s) with dustcap (Type A)	1	1
Ethernet 10GbE (10GBASE-T)	(M12 female, x-coded)	1
Ethernet 1GbE (100/1000 BASE-T)	(M12 female, x-coded)	1
CAN 2.0A / CAN 2.0B (active/passive), CAN FD supported, isolated	(M12 female, a-coded)	2
GPIOs (Digital I/O's), current sinking, isolated <sup>12/24VDC</sup>	(M12 male, a-coded)	4in / 2out
Serial RS232	(M12 male, a-coded)	1
Full size mini PCIe socket	1	1
Wireless Connectivity		
Cellular 4G Module (LTE/UMTS/GSM) with GNSS Sierra Wireless EM7590 (Dual nano SIM support)	3 × SMA	none
Wireless LAN 802.11ax/ac/a/b/g/n (Wi-Fi 6E) dual-band 2x2 MIMO Intel AX210	2 × RP-SMA	none
Cellular 5G module (4G/3G fallback) with GNSS	on request	on request
High precision multiband GNSS module with optional heading support <sup>1</sup> u-blox ZED-F9P/F9R	on request	on request
Technical Data		
Dimensions excl. mounting holes [mm]	w250 × h75 × d170	w250 × h75 × d170
Net weight [gram]	~3000	~3000
Non-isolated input voltage with ignition controller and RP protection (M12 male, L-coded)	9 ... 45VDC	9 ... 45VDC
Power consumption <sup>3</sup>	~tbd	~tbd
Software / OS		
NVIDIA JetPack SDK – <a href="#">Jetson Linux</a> (Ubuntu based)	✓	✓
Environmental Conditions		
Operating temperature <sup>3</sup>	-25°C ... +65°C	-25°C ... +65°C
Storage temperature	-25°C ... +80°C	-25°C ... +80°C
Ingress protection standard according to EN60529	IP67, IP69	IP67, IP69
Conformal coating <sup>4</sup>	on request	on request
Shock according to ISO 15003 (designed to meet)	50g peak acc. (11ms)	50g peak acc. (11ms)
Vibration according to ISO 15003 (designed to meet)	4.1g (10 – 350Hz)	4.1g (10 – 350Hz)
EMC-Conformity	EN55032 / EN55035	EN55032 / EN55035
Safety (designed to meet)	EN62368-1	EN62368-1
Radio and Telecommunication (designed to meet)	n/a	RED
Estimated MTBF @ 25°C ambient <small>according to Telcordia SR-332, Environment G8, excluding battery and SSD</small>	~tbd	~tbd

<sup>1</sup> Please contact factory for minimum order quantities

<sup>2</sup> Internal connector

<sup>3</sup> Depending on installation situation and interface connection. Please see user documentation.

<sup>4</sup> On all possible components (excl. AGX Orin module, connectors and wireless devices)

## Rugged Computer RSLA4AGX

 Order Code [RPC/RSLA4AGX64-BI02S'](#) [RPC/RSLA4AGX64-C102S'](#)

Processor module / Performance		
NVIDIA Jetson <b>AGX Orin 64GB</b> 2048-core Ampere GPU with 64 Tensor Cores 12-core NVIDIA Arm® Cortex A78AE CPU	✓	✓
NVIDIA Jetson <b>AGX Orin Industrial</b> 2048-core Ampere GPU with 64 Tensor Cores (ECC) 12-core NVIDIA Arm® Cortex A78AE CPU	on request <sup>1</sup>	on request <sup>1</sup>
Memory / Storage		
256-bit LPDDR5 RAM (204.8GB/s) soldered on module	64GB	64GB
eMMC 5.1 Flash Storage on board	64GB	64GB
M.2 2280 Key M socket (for 240GB – 2TB NVMe SSD)	1	1
Features		
Inertial measurement unit (IMU) STMicro ISM330DHCXTR	✓	✓
Real time clock (RTC), with battery backup Renata CR2477 (950 mAh)	✓	✓
Communication Interfaces		
DisplayPort 1.4a @ 8K60 behind the service cover (rear)	1	1
Internal USB version 2.0 behind the service cover (rear), for device flashing and SSH access only (micro USB Type AB)	1	1
USB version 2.0 behind the service cover (rear) (Type A)	2	2
USB version 3.1 (5 Gbit/s) with dustcap (Type A)	1	1
Ethernet 10GbE (10GBASE-T) (MI2 female, x-coded)	1	1
Ethernet 1GbE (100/1000 BASE-T) (MI2 female, x-coded)	1	1
CAN 2.0A / CAN 2.0B (active/passive), CAN FD supported, isolated (MI2 female, a-coded)	2	2
GPIOs (Digital I/O's), current sinking, isolated <sup>12/24VDC</sup> (MI2 male, a-coded)	4in / 2out	4in / 2out
Serial RS232 (MI2 male, a-coded)	1	1
Full size mini PCIe socket	1	1
Wireless Connectivity		
Cellular 4G Module (LTE/UMTS/GSM) with GNSS Sierra Wireless EM7590 (Dual nano SIM support)	3 x SMA	none
Wireless LAN 802.11ax/ac/a/b/g/n (Wi-Fi 6E) dual-band 2x2 MIMO Intel AX210	2 x RP-SMA	none
Cellular 5G module (4G/3G fallback) with GNSS	on request	on request
High precision multiband GNSS module with optional heading support <sup>1</sup> u-blox ZED-F9P/F9R	on request	on request
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Power consumption <sup>3</sup>	~tbd	~tbd
Software / OS		
NVIDIA JetPack SDK – <a href="#">Jetson Linux</a> (Ubuntu based)	✓	✓
Environmental Conditions		
Operating temperature <sup>3</sup>	-25°C ... +65°C	-25°C ... +65°C
Storage temperature	-25°C ... +80°C	-25°C ... +80°C
Ingress protection standard according to EN60529	IP67, IP69	IP67, IP69
Conformal coating <sup>4</sup>	on request	on request
Shock according to ISO 15003 (designed to meet)	50g peak acc. (11ms)	50g peak acc. (11ms)
Vibration according to ISO 15003 (designed to meet)	4.1g (10 – 350Hz)	4.1g (10 – 350Hz)
EMC-Conformity	EN55032 / EN55035	EN55032 / EN55035
Safety (designed to meet)	EN62368-1	EN62368-1
Radio and Telecommunication (designed to meet)	n/a	RED
Estimated MTBF @ 25°C ambient <sup>according to Telcordia SR-332, Environment GB, excluding battery and SSD</sup>	~tbd	~tbd

<sup>1</sup> Please contact factory for minimum order quantities

<sup>2</sup> Internal connector

<sup>3</sup> Depending on installation situation and interface connection. Please see user documentation.

<sup>4</sup> On all possible components (excl. AGX Orin module, connectors and wireless devices)

## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

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