NVIDIA PREFERRED PARTNER

syslogic

Rugged Computer **RML A4AGX**

Computer Vision Edge Unit with NVIDIA Jetson AGX Orin

similar image

Product Highlights

- 24/7 continuous operation
- 8x camera inputs (GMSL2) with PoC
- Power Over Ethernet (PoE+), 48VDC out
- High shock and vibration resistance
- IP67, IP69K rating

ACCESSORIES

CE UK CA

Rugged Computer RML A4AGX

		Order Code RPC/RMLA4AGX32-M202S[1]	RPC/RMLA4AGX32-N202S[1]
Processor module / Performance			
NVIDIA Jetson **AGX Orin 32GB** 1792-core Ampere GPU with 56 Tensor Cores 8-core NVIDIA Arm® Cortex A78AE CPU		✓	✓
NVIDIA Jetson **AGX Orin 64GB** 2048-core Ampere GPU with 64 Tensor Cores 12-core NVIDIA Arm® Cortex A78AE CPU		see page 3	see page 3
NVIDIA Jetson **AGX Orin Industrial** 2048-core Ampere GPU with 64 Tensor Cores (ECC) 12-core NVIDIA Arm® Cortex A78AE CPU		on request [1]	on request [1]
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 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)	(M12 female, x-coded)	1	1
Ethernet 1GbE (100/1000 BASE-T)	(M12 female, x-coded)	1	1
Power over Ethernet 1GbE (PoE+), IEEE802.3at Power sourcing equipment, producing 48VDC out, Total maximal power: 39W	(M12 female, x-coded)	4	4
GMSL2 camera inputs, with Power over Coax (PoC), 12VDC+/-5% Maximal power per port: 3W	(Fakra-Z)	8	8
CAN 2.0A / CAN 2.0B (active/passive), CAN FD supported, isolated	(M12 female, a-coded)	2	2
GPIOs (Digital I/O's), current sinking, isolated 12/24VDC	(M12 male, a-coded)	4in / 2out	4in / 2out
Serial RS232	(M12 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 × 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 [1] u-blox ZED-F9P/F9R		on request	on request
Technical Data			
Dimensions excl. mounting holes [mm]		w250 × h100 × d170	w250 × h100 × d170
Net weight [gram]		~4500	~4500
Non-isolated input voltage with ignition controller and RP protection	(M12 male, L-coded)	9.5 ... 45VDC	9.5 ... 45VDC
Power consumption [3]		~tbd	~tbd
Software / OS			
NVIDIA JetPack SDK – Jetson Linux (Ubuntu based)		✓	✓
Environmental Conditions			
Operating temperature [3]		–25°C ... +60°C	–25°C ... +60°C
Storage temperature		–25°C ... +80°C	–25°C ... +80°C
Ingress protection (designed to meet)		IP67, IP69K	IP67, IP69K
Conformal coating [4]		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)		RED	n/a
Estimated MTBF @ 25°C ambient according to Telcordia SR-332, Environment GB, excluding battery and SSD		~tbd	~tbd

[1] Please contact factory for minimum order quantities
[2] Internal connector
[3] Depending on installation situation and interface connection. Please see user documentation.
[4] On all possible components (excl. AGX Orin module, connectors and wireless devices)

For support and further information
support@syslogic.ai
or www.syslogic.ai

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Rugged Computer RML A4AGX

		Order Code	RPC/RMLA4AGX64-M202S[1]	RPC/RMLA4AGX64-N202S[1]
Processor module / Performance				
NVIDIA Jetson **AGX Orin 64GB** 2048-core Ampere GPU with 64 Tensor Cores 12-core NVIDIA Arm® Cortex A78AE CPU			✓	✓
NVIDIA Jetson **AGX Orin Industrial** 2048-core Ampere GPU with 64 Tensor Cores (ECC) 12-core NVIDIA Arm® Cortex A78AE CPU			on request [1]	on request [1]
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)	(M12 female, x-coded)		1	1
Ethernet 1GbE (100/1000 BASE-T)	(M12 female, x-coded)		1	1
Power over Ethernet 1GbE (PoE+), IEEE802.3at Power sourcing equipment, producing 48VDC out, Total maximal power: 39W	(M12 female, x-coded)		4	4
GMSL2 camera inputs, with Power over Coax (PoC), 12VDC$^{+/-5\%}$ Maximal power per port: 3W	(Fakra-Z)		8	8
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GPIOs (Digital I/O's), current sinking, isolated 12/24VDC	(M12 male, a-coded)		4in / 2out	4in / 2out
Serial RS232	(M12 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 × 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 [1] u-blox ZED-F9P/F9R			on request	on request
Technical Data				
Dimensions excl. mounting holes [mm]			w250 × h100 × d170	w250 × h100 × d170
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Non-isolated input voltage with ignition controller and RP protection	(M12 male, L-coded)		9.5 ... 45VDC	9.5 ... 45VDC
Power consumption [3]			~tbd	~tbd
Software / OS				
NVIDIA JetPack SDK – Jetson Linux (Ubuntu based)			✓	✓
Environmental Conditions				
Operating temperature [3]			–25°C ... +60°C	–25°C ... +60°C
Storage temperature			–25°C ... +80°C	–25°C ... +80°C
Ingress protection (designed to meet)			IP67, IP69K	IP67, IP69K
Conformal coating [4]			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)			RED	n/a
Estimated MTBF @ 25°C ambient according to Telcordia SR-332, Environment GB, excluding battery and SSD			~tbd	~tbd

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