NVIDIA PREFERRED PARTNER

syslogic

Rugged Computer **RML A4NX**

Computer Vision Edge Unit with NVIDIA Jetson Orin NX (16GB)

preliminary

Rugged Series

similar image

Product Highlights

- 24/7 continuous operation
- IP67 protection, extended temperature range
- Power ignition controller
- High shock and vibration resistance
- GMSL2 camera inputs with PoC

ACCESSORIES

CE UK CA

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Rugged Computer RML A4NX

		Order Code RPC/RMLA4NX16-N202S-02[1,6]	RPC/RMLA4NX16-M202S-02[1,6]
Processor module / Performance			
NVIDIA Jetson Orin NX	(16GB RAM) 1024-core NVIDIA Ampere GPU with 32 Tensor Cores 8-core NVIDIA Arm® Cortex A78AE 64-bit CPU	✓	✓
NVIDIA Jetson Orin NX	(8GB RAM) 1024-core NVIDIA Ampere GPU with 32 Tensor Cores 6-core NVIDIA Arm® Cortex A78AE 64-bit CPU	on request [1]	on request [1]
AI Performance		100 TOPs	100 TOPs
Memory / Storage			
128-Bit LPDDR5 (102,4 GB/s) RAM soldered on board		16GB	16GB
M.2 2280 Key M socket (for NVMe SSD) [6], an SSD is required, no internal eMMC storage available		240GB	240GB
microSD Card socket [2]		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 @ 8K30 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 10/100/1000 BASE-T (1× native, 1× I210-IT)	(M12 female, x-coded)	2	2
GMSL2 camera inputs, with Power over Coax (PoC) 12VDC+/-5% 3W max. power limit per port	(FAKRA-Z, IP67)	8	8
CAN 2.0A / CAN 2.0B (active/passive), CAN FD supported, isolated	(M12 female, a-coded)	1	1
CAN 2.0B only (active/passive), CAN FD supported, isolated	(M12 female, a-coded)	1	1
Digital I/O's, current sinking, isolated 12/24VDC	(M12 male, a-coded)	4in / 2out [5]	4in / 2out [5]
Serial RS232	(M12 male, a-coded)	1	1
USB version 2.0 [1]	(M12 female, a-coded)	on request	on request
Wireless Connectivity			
Cellular 4G Module (LTE/UMTS/GSM) with GNSS Sierra Wireless EM7590 (Dual nano SIM support)		none	3 × SMA
Wireless LAN (Wi-Fi 6/6E) 802.11ax/ac/a/b/g/n dual-band 2x2 MIMO & Bluetooth 5.2 Intel AX210		none	2 × RP-SMA
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 × h85 × d170	w250 × h85 × d170
Net weight [gram]		~3600	~3650
Non-isolated input voltage with ignition controller and RP protection	(M12 male, a-coded)	9 ... 45VDC	9 ... 45VDC
Power consumption [3]		~tbd	~tbd
Software / OS			
NVIDIA JetPack SDK – Jetson Linux (Ubuntu based)		✓	✓
Environmental Conditions			
Operating temperature [3]		–25°C ... +70°C	–25°C ... +70°C
Storage temperature		–25°C ... +85°C	–25°C ... +85°C
Ingress protection standard according to EN60529		IP67	IP67
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)		2g (10 – 350Hz)	2g (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 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. Xavier NX module, connectors and wireless devices)
[5] The six total digital I/Os are each configurable as either output or input via software.
[6] The product must be ordered with an SSD, use the following order codes: RPC/RMLA4NX16-x202S-**02**(240GB), **-05**(480GB), **-10**(960GB), **-20**(1920GB)

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

Product specifications subject to change without notice. All data is for information purposes only and not guaranteed for legal purposes. Information in this data sheet has been carefully checked and is believed to be accurate. However, no responsibility is assumed for inaccuracies. Please refer to the user documentation for additional product specification.

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