

Railway



Railway Computer RSL 83

Embedded Railway Computer with Intel® Atom™ Amston Lake processor (x7000 Series)

PRELIMINARY

Image similar



Product Highlights
Maintenance free
Long term availability
Trusted platform module (TPM 2.0)
Fanless, no moving parts
Railway approved EN 50155 & 45545

Market/Applications
Railway (rolling stock)
Transportation

IPC RSL 83

This fanless entry level Railway Computer is based on the Intel® Atom™ Amston Lake (ASL) processor technology.

The robust and uncompromising industrial design allows the implementation in rolling stock applications and guarantees long term availability. This Railway computer is also available as DIN-Rail Variant.

→ Intel® Atom™ Amston Lake Series
 → Designed for 24/7 continuous operation
 → 24VDC Isolated input voltage

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Order Code **IPC/RSL83I11-C150E**

Processor / Performance	
Intel® Atom™ x7211RE - Dual core 100MHz clock 8GB RAM	✓
Intel® Atom™ x7433RE - Quad core 1.5GHz clock 16GB RAM	on request
Memory / Storage	
L2 cache	6MB
4800MT/s LPDDR5x RAM soldered on board (16GB on request)	8GB
Internal eMMC 32GB (64GB version available)	✓
Features	
Real time clock PC compatible with Goldcap backup (up to 48h)	✓
Hardware Watchdog & Temperature supervisor	✓
TPM 2.0 according to ISO/IEC11889	optional
Communication Interfaces	
DisplayPort 1.4 (4096 x 2160 @ 60Hz)	1
USB version 3.2 up to 5Gps (Type A)	2
Ethernet 10/100/1000 BASE-T (1x Intel® GbE 1x Intel® i210-IT)	2 (M12 female x-coded)
Buzzer	✓
Technical Data	
Exterior Dimensions [mm] (housing incl. mounting plate)	w257 x h54 x d127
Net weight [gram]	~1500
Isolated input voltage (M12 4P male a-coded)	16.8 ... 30VDC
Interruption of voltage supply time	EN50155 - Class: S1
Power consumption typ. in Watt @ 24V without Add-Ins	~12
Environmental Conditions	
Operating temperature (complies with EN50155 class OT4/ST0) ³	-40°C ... +70°C
Non operating temperature (Recommended storage temperature 20°C .. 25°C)	-40°C ... +85°C
Ingress protection standard according to EN60529	IP40
Conformal coating ⁴	PCX
MTBF @ 25°C according to Telcordia SR-332, Environment GM, excluding Cfast and optional interfaces	TBD
Certifications	
Railway certification EN50155	✓
Railway environmental conditions EN50125	✓
Shock EN61373	✓
Vibration EN61373	✓
EMI-Conformity EN50121-3-2	✓
Safety (according to EN62368-1)	designed to meet
Fire protection DIN EN45545-2	HL3
UKCA/CE	✓
Software	
Supports various Linux Distributions	✓
BSP Windows T1 IoT Enterprise LTSC	✓

Scope of delivery
 1x Mounting Brackets for DIN Rail (optional)
 2x Protective cap USB A
 1x Protective cap DisplayPort
 1x Device packaging

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. Connectors)

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.

For support and further information:
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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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