

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)		(M12 female x-coded) 2
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

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