



TYPE APPROVAL CERTIFICATE

Certificate No:
TAA00001TS
Revision No:
4

This is to certify:

That the **Personal Computer**

with type designation(s)
RXi-142 Industrial PC platform

Issued to

ICC Intelligent Platforms GmbH
Augsburg, Bayern, Germany

is found to comply with

DNV rules for classification – Ships, offshore units, and high speed and light craft

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

Location classes:

Type	Temperature	Humidity	Vibration	EMC	Enclosure
RXi-142	B	B	A	B	Required protection according to DNV Rules shall be provided upon installation on board

Issued at **Hamburg** on **2023-05-10**

This Certificate is valid until **2028-04-23**.

DNV local unit: **Augsburg**

for **DNV**

Approval Engineer: **Didier Girardin**

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Joannis Papanuskas
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Product description

Industrial PC platform RXi-142 with 0, 2 or 4 PCI slots:

- Carrier: CEC04-44U0F
- Graphics: DisplayPort
- 5x GbE LAN Ports
- 4x USB universal serial bus 2.0 ports
- 1x CFAST slot with external access
- Nominal Voltage 24 VDC (+/- 25%)
- Reset and Power button

Detail product description **see Annex.**

Application/Limitation

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV, documentation for the actual application is to be submitted for approval by the manufacturer of the application system in each case. Reference is made to DNV Rules for Ships Pt.4 Ch.9 Control and Monitoring Systems.

Product certificate

If specified in the Rules, ref. Pt.4 Ch.9 Sec.1, the control and monitoring system in which the above listed hardware is used shall be delivered with a product certificate. For each such delivery the certification test is to be performed at the manufacturer of the application system before the system is shipped to the yard. The test shall be done according to an approved test program. After the certification the clause for application software control will be put into force.

Clause for application software control

All changes in software are to be recorded as long as the system is in use on board. The records of all changes are to be forwarded to DNV for evaluation and approval. Major changes in the software are to be approved before being installed in the computer.

Type Approval documentation

See Annex

Tests carried out

RXi-142 Industrial PC platform:

Applicable tests according to class guideline DNV-CG-0339, Aug. 2021

The 'Compass safe distance' was measured according to section 11.2 of IEC 60945 4th edition (2002).

Marking of product

- Identification of the manufacturer,
- Equipment type number or model identification under which it was type tested,
- Serial number of the unit,
- Compass safe distance.

Alternatively, the minimum safe distance for fixed equipment may be given in the equipment manual, but portable equipment shall always be marked according 60945 IEC:2002 Ch. 4.5.3

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.

The main elements of the assessment are:

- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE

ANNEX

Options			Description
Platform with standard features as above under Product Description			
1	4	2	142 Industrial PC Platform
PCI extension slots			
		0	No PCI slots, no riser card
		2	2x PCI slots with riser card 043-S2A
		4	4x PCI slots with riser card 044-S4A
Housing			
		0	extrusion profile housing, no Fan
Customer PCI extension cards			
		x	x = A .. Z
CPU Modules			
		A	INTEL Celeron G3902E 4GB, bC6L18F6J0CHA
		B	INTEL i3-7100E 4GB, bC6L20T6J0CHA
		C	INTEL i3-7100E 8GB, bC6L20T7J0CHA
Customer Software			
		x	x = 0 .. 9
Storage Device			
		1	2.5 inch storage bay, no storage device
		K	256 GB MLC SSD
		L	512 GB MLC SSD
CFast card extension			
		1	CFast slot without storage card
		2	4 GB CFast card installed
nvSRAM extension			
		0	no nvSRAM
		3	512 kB nvSRAM
Serial interfaces			
		1	1 RS232, 1x RS422/485 opto-coupled
		2	2x RS232
		4	2x RS232, 2x RS422/485 opto-coupled
Temperature range			
		A	0 to 60°C - commercial temperature



Type Approval documentation
Hidden

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