



Certificate no.:
TAA00003KB

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Industrial Computer

with type designation(s)
BXP series; DRP series

issued to

Moxa Inc.
Taoyuan City, Taiwan Region

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:

Temperature D

Humidity B

Vibration A

EMC B

Enclosure Required protection according to DNV rules shall be provided upon installation on board

Issued at **Hamburg** on **2025-04-02**

This Certificate is valid until **2030-04-01**.

for **DNV**

DNV local unit: **Kaohsiung**

Approval Engineer: **Holger Jansen**

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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 USD 300 000.

Product description

BXP-C100 series

Embedded computer

Model Name	CPU	LAN/Serial
BXP-C100-C1-T	Intel Celeron® 6305E	2x LAN/2x Serial
BXP-C100-C1-T-WIN10		2x LAN/2x Serial
BXP-C100-C1-8L-T		10x LAN/2x Serial
BXP-C100-C1-8C-T		2x LAN/10x Serial
BXP-C100-C1-2L3C-T		4x LAN/5x Serial
BXP-C100-C5-T	Intel i5-1145G7E	2x LAN/2x Serial
BXP-C100-C5-T-WIN10		2x LAN/2x Serial
BXP-C100-C5-8L-T		10x LAN/2x Serial
BXP-C100-C5-8C-T		2x LAN/10x Serial
BXP-C100-C5-2L3C-T		4x LAN/5x Serial
BXP-C100-C7-T	Intel i7-1185G7E	2x LAN/2x Serial
BXP-C100-C7-T-WIN10		2x LAN/2x Serial
BXP-C100-C7-8L-T		10x LAN/2x Serial
BXP-C100-C7-8C-T		2x LAN/10x Serial
BXP-C100-C7-2L3C-T		4x LAN/5x Serial
Input voltage: 12/24 Vdc		
Memory: 8 GB DDR4		
Video Outputs: 1x VGA, 1x HDMI		
Ports: 4x USB2.0, 2x USB3.0		
4x DI, 4x DO		
Installation: Wall mounting		
Compass safe distance: Standard: 700 mm		
Steering: 600 mm		

BXP-A100 series

Embedded computer

Model Name	CPU	LAN/Serial
BXP-A100-E2-T	Intel Atom® x6211E	2x LAN/2x Serial
BXP-A100-E2-T-WIN10		2x LAN/2x Serial
BXP-A100-E2-8L-T		10x LAN/2x Serial
BXP-A100-E2-8C-T		2x LAN/10x Serial
BXP-A100-E2-2L3C-T		4x LAN/5x Serial
BXP-A100-E4-T	Intel Atom® x6425E	2x LAN/2x Serial
BXP-A100-E4-T-WIN10		2x LAN/2x Serial
BXP-A100-E4-8L-T		10x LAN/2x Serial
BXP-A100-E4-8C-T		2x LAN/10x Serial
BXP-A100-E4-2L3C-T		4x LAN/5x Serial

Input voltage:	12/24 Vdc
Memory:	8 GB DDR4
Video Outputs:	1x VGA, 1x HDMI
Ports:	4x USB2.0, 2x USB3.0 4x DI, 4x DO
Installation:	Wall mounting
Compass safe distance for Intel Atom® x6211E:	Standard: 500 mm Steering: 400 mm
Compass safe distance for Intel Atom® x6425E:	Standard: 400 mm Steering: 300 mm

DRP-C100 series

DIN-Rail computer

Model Name	CPU	LAN/Serial
DRP-C100-C1-T	Intel Celeron® 6305E	2x LAN/2x Serial
DRP-C100-C1-T-WIN10		2x LAN/2x Serial
DRP-C100-C1-8L-T		10x LAN/2x Serial

DRP-C100-C1-6C-T		2x LAN/8x Serial
DRP-C100-C1-2L4C-T		4x LAN/6x Serial
DRP-C100-C5-T	Intel i5-1145G7E	2x LAN/2x Serial
DRP-C100-C5-T-WIN10		2x LAN/2x Serial
DRP-C100-C5-8L-T		10x LAN/2x Serial
DRP-C100-C5-6C-T		2x LAN/8x Serial
DRP-C100-C5-2L4C-T		4x LAN/6x Serial
DRP-C100-C7-T		Intel i7-1185G7E
DRP-C100-C7-T-WIN10	2x LAN/2x Serial	
DRP-C100-C7-8L-T	10x LAN/2x Serial	
DRP-C100-C7-6C-T	2x LAN/8x Serial	
DRP-C100-C7-2L4C-T	4x LAN/6x Serial	
Input voltage: 12/24 Vdc		
Memory: 8 GB DDR4		
Video Outputs: 1x VGA, 1x HDMI		
Ports: 3x USB3.0		
Installation: DIN-rail		
Compass safe distance: Standard: 300 mm		
Steering: 200 mm		

DRP-A100 series

Industrial computer

Model Name	CPU	LAN/Serial
DRP-A100-E2-T	Intel Atom® x6211E	2x LAN/2x Serial
DRP-A100-E2-T-WIN10		2x LAN/2x Serial
DRP-A100-E2-8L-T		10x LAN/2x Serial
DRP-A100-E2-8C-T		2x LAN/8x Serial
DRP-A100-E2-2L3C-T		4x LAN/6x Serial
DRP-A100-E4-T	Intel Atom® x6425E	2x LAN/2x Serial
DRP-A100-E4-T-WIN10		2x LAN/2x Serial
DRP-A100-E4-8L-T		10x LAN/2x Serial
DRP-A100-E4-8C-T		2x LAN/8x Serial
DRP-A100-E4-2L3C-T		4x LAN/6x Serial
Input voltage: Memory: Video Outputs: Ports: Installation:	12/24 Vdc 8 GB DDR4 1x VGA, 1x HDMI 3x USB3.0 DIN-rail	
Compass safe distance:	Standard: 300 mm Steering: 200 mm	

Place of manufacture

Moxa Inc.

No. 1111, Heping Road, Bade Dist., Taoyuan City, 334004, Taiwan

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 certification the clause for software control will be put into force.

Software control

All changes in software are to be recorded as long as the system is in use on board. Documentation of major changes is to be forwarded to DNV for evaluation and approval before implemented on board. Certification of modified functionality may be required for the particular vessel.

Type Approval documentation

Tests carried out

Applicable tests according to Class Guideline DNV-CG-0339, Edition August 2021.

Applicable tests according to IACS Unified Requirements E10, Rev.10.

Applicable tests for protected equipment according to IEC 60945, 4th edition (2002).

Marking of product

The products to be marked with:

- Model name
- Manufacturer name
- Serial number

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