Certificate no.:
TAA00003NF

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Personal Computer

with type designation(s)
Power Edge XR5610

issued to
Dell Inc.
Round Rock, TX, USA

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	**A**
Humidity	**A**
Vibration	**A**
EMC	**B**
Enclosure	**A / IP20**

Issued at **Høvik** on **2025-08-08**

This Certificate is valid until **2030-08-07**.

for **DNV**

DNV local unit: **Certification & Inspection Services**

Approval Engineer: **Nikolai Arntzen**

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.

Product description
See details in ANNEX

Manufactured by
FSJ/DAO
PCE Technology de Juarez , S.A de C.V
Blvd.Intl No. 8888, San Jeronimo
Cd. Juarez, Chih. C.P 32505

CCC
Dell (Xiamen) Computer Co., Ltd
No.2388, JinShang Road,
Xiamen 361011 China

APCC
Dell Global Business Center Sdn Bhd.
Plot 76, Mukim II,
Bukit Tengah Industrial Park
Penang 14000 Bukit Mertajam Malaysia

EMFP
Dell Products (Poland) Sp. z o.o.
ul. Informatyczna 1
Lodz 92-410 POLAND

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 classification of ships Pt.4 Ch.9 Control and monitoring systems

Bridge installation requires measures to reduce acoustic noise emissions.

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.

Each delivery to be provided with installation instruction or later approved version including safe distance to compass and communication cable shielded type

Equipment to be installed in accordance to manufacturers documentation and manufacturers installation procedures.

Type Approval documentation

Tests carried out
Applicable tests according to class guideline DNV-CG-0339 August 2021
Compass safe distance measured according to IEC 60945, 4th edition (2002).

Marking of product
The products to be marked with:
- manufacturer name
- model name
- serial number
- power supply ratings

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.

ANNEX
Product description as tested

XR5610 Config 1

Commodity	DPN	Description	Vendor	MPN
XR5610	2YWT6	Rear Port Access Chassis with up to 4 SAS/SATA Drives, PERC11, NAF	Foxconn	1A6273V00-600-G
Processor	WYY2W	Intel® Xeon® Silver 4509Y 2.6GHz	Intel	PK8071305554400-SRN61
Memory	J52K5	64GB RDIMM, 4800MT/s Dual Rank	Hynix	HMCG94AEBRA
SSD	2DXDK	3.84TB SSD SATA Read Intensive 6Gbps 512 2.5in Hot-plug AG Drive, 1 DWPD	Micron	MTFDDAK3T8TGA-1B
SSD	9C7XV	7.68TB PM1653 SSD	Samsung	MZILG7T6HBLAAD3
SSD	0MK1V	SI,HD,SSDR,7.6T,2E,SV12,D480G	KIOXIA	KRM7VRUG7T68
SSD	81G77	800GB SAS	KIOXIA	KPM7WVUG800G
OCP	Y4VV5	Intel E810-XXVDA4 Quad Port 10/25GbE SFP28 Adapter, OCP NIC 3.0	Intel	Y4VV5
PSU	J9N6W	Dual, redundant (1 + 1), Hot-Plug-Netzteil, 1.100 W MM (100–240 V AC) Titanium	Delta	DPS-1100AB-21 A
PCIe Adapter	NG3PY	Nvidia L4	Nvidia	900-2G193-0100-001
PCIe Adapter	VCV6T	PERC H355 Adapter FH	Foxconn	1A623T400-600-G
BOSS	4FYFF	BOSS-N1 controller card + with 2 M.2 960GB - RAID 1	Foxconn	1A628A200-600-G

XR5610 Config 2

Commodity	DPN	Description	Vendor	MPN
XR5610	6DJ33	Rear Port Access Chassis with up to 4 SATA Drives (Onboard SATA), NAF	Foxconn	1A6297U00-600-G
Processor	FMF9R	Intel® Xeon® Gold 6421N	Intel	PK8071305122001SRMH0
Memory	J52K5	64GB RDIMM, 4800MT/s Dual Rank	Hynix	HMCG94AGBRA181N
SSD	01V69	960GB 5400 SATA SSD	Micron	MTFDDAK960TGB-1B
SSD	0J1X2	960GB 5400 SATA SSD	Micron	MTFDDAK960TGA-1B

SSD	65T1J	480GB PM897 SSD	Samsung	MZ7L3480HBLT-00AD3
SSD	N9DWP	480GB 5400 SATA SSD	Micron	MTFDDAK480TGA-1B
PSU	MGPPC	Dual, Hot-plug, Power Supply Redundant (1+1), 800W, Mixed Mode, NAF	Delta	DPS-1100AB-14 A
PSU	C8T2P	Dual, Hot-plug, Power Supply Redundant (1+1), 800W, Mixed Mode, NAF	LiteOn	PS-2801-15D
OCP	VJWVJ	Broadcom 5720 Quad Port 1GbE BASE-T Adapter, OCP NIC 3.0	Broadcom	BCM95720N2004DC
PCIe Adapter	MVK5F	Broadcom 5719 Quad Port 1GbE BASE-T Adapter, PCIe Full Height, V2,	Broadcom	BCM95719A1904DCT
PCIe Adapter	29XMF	H755 PERC	Foxconn	1A52FH800-600-G

XR5610 Config 3				
Commodity	**DPN**	**Description**	**Vendor**	**MPN**
XR5610	2YWT6	Rear Port Access Chassis with up to 4 SAS/SATA Drives, PERC11, NAF	Foxconn	1A6273V00-600-G
Processor	FMF9R	Intel® Xeon® Gold 6421N	Intel	PK8071305122001S RMH0
Memory	J52K5	64GB RDIMM, 4800MT/s Dual Rank	Hynix	HMCG94AGBRA181N
SSD	RGP9J	3.2TB PM7 SAS SSD	Kioxia	KPM7WVUG3T20
SSD	KJ1TM	1.6TB SSD SAS, Mixed Use, up to 24Gbps FIPS- 140 512e 2.5in Hot-Plug, AG Drive	Kioxia	KPM71VUG1T60
SSD	VYYW8	1.9TB SSD S4520	Intel	SSDSC2KB019TZR
SSD	TBD	1.9TB SSD PM897	Samsung	MZ7L31T9HBNA-00AD3
OCP	XC0M4	Intel X710-T4L Quad Port 10GbE Base-T, OCP 3.0 Version 2	Intel	XC0M4
PSU	7DWXY	Dual, Hot Plug, Power Supply, Redundant (1+1) 1400W (100-240Vac)	Delta	DPS-1400AB-7 A
PSU	6C11W	Dual, Hot Plug, Power Supply, Redundant (1+1) 1400W (100-240Vac)	LiteOn	DPS-800AB-46 A
PCIe Adapter	7GRF6	HBA355i	Foxconn	1A62AVP00-600-G
PCIe Adapter	MG5JX	NVIDIA Ampere A2, PCIe, 60W, 16GB Passive, Single Wide, Full Height GPU,V2	Nvidia	900-2G179-0120-101
BOSS	FNGXY	BOSS-N1 controller card + with 2 M.2 480GB - RAID 1	Micron	MTFDDAV240TCB-1AR1ZABDA

Additional Equipment

Commodity	DPN	Description	Vendor	MPN
Power Filter	5HP4Y	15A/12A Power Filter	TSS	5HP4Y