TYPE APPROVAL CERTIFICATE

DNV·GL

This is to certify:

That the Industrial Computer

with type designation(s)
Magelis Box iPC, Magelis / Harmony Modular PC

Issued to
Schneider Electric France S.A.S.
Carros, France

is found to comply with
DNV GL 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 GL.

Location classes:

Type	Temp.	Hum.	Vibr.	EMC	Enclosure
Magelis Box iPC	D	B	A	B	**Required protection according to relevant rules shall be provided upon installation on board**
Magelis / Harmony Modular PC	B	B	A	A	

Issued at **Høvik** on **2020-02-26**

This Certificate is valid until **2021-05-08**.
DNV GL local station: **France CMC**

Approval Engineer: **Nils Jarem**

for **DNV GL**

Marta Alonso Pontes
Head of Section

Product description

Box iPC Modular - Optimized / Performance (Prefixed model)
HMIBMO –HMIBMP* series :

Digit	1-3	4	5	6	7	8	9	10	11	12	13	14	15
Range name	HMI												
iPC family	Magelis Box iPC	B											
Type			M										
	Optimized			O									
	Performance			P									
	SSD				S								
	CFast card				C								
	M.2 SSD				M								
	eMMc				E								
	None				0								
CPU type	Atom					A	5	D					
	Core i7					I	7	4					
Power supply	Input 24Vdc								D				
	100 – 240 Vac TG14-0135-01 or FSP132-1B48-C24								A				
Ex. slots	1 mini PCIe									1			
	2 mini PCIe									2			
	2 mini PCIe and PCIe and PCI									4			
	2 mini PCIe and 2 PCI									I			
	2 mini PCIe and 2 PCIe									E			
	1 mini PCIe for optional interface + 2.5" HDD/SSD slot									F			
OS	See user manual. "*" Any letter or number										*		
Software	"*" Any letter or number											*	
Hardware	"*" Any letter or number												*

HMIPCCP2 series:

Magelis / Harmony Modular PC															
Character number	1-6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Prefix	HMIPCC														
Base unit	Modular Optimized	L													
	Modular Performance	P													
Product generation	Second generation		2												
Display type	None			B											
	Display 4:3 12"			6											
	Display 4:3 15"			7											
	Display W12"			D											
	Display W15"			J											
	Display W19"			L											
	Display W21"			N											
Box type	# Any letter or number except 5 and 6				#										
CPU type	Optimized – Atom fanless					B									
	Performance - Core i7 fanless					7									
Power supply	100 - 240Vac TG14-0135-01 or FSP132-1B48-C24						A								
	24Vdc						D								
RAM size								*							
Operating system									*						
Storage device	None									N					
	CFast									*					
	SSD									*					
	M.2 SSD									*					
Options	None										0				
	Interface										*				
Second storage	None											N			
	CFast											*			
	SSD											*			
Software bundle													*		
Customization														*	
Spare															*
* Any letter or number															

Tested firmware versions: 1.13
Compass safe distances: Standard: 80 cm; Steering: 55 cm

Display reference:

HMIDM6421	Display 4:3 12" single touch for HMIBM
HMIDM6521	Display W12" multi-touch for HMIBM
HMIDM7421	Display 4:3 15" single touch for HMIBM
HMIDM7521	Display W15" multi-touch for HMIBM
HMIDM9521	Display W19" multi-touch for HMIBM
HMIDMA521	Display W22" multi-touch for HMIBM

Place of manufacture
1, Alley 20, Lane 26, Rueiguang Road, Neihu District, Taipei 114, Taiwan

Approval conditions
The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV GL, 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 GL rules for classification of 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 GL for evaluation and approval before implemented on board. Certification of modified functionality may be required for the particular vessel.

Type Approval documentation

	Document	Revision
Data sheet:	HMIBMPHI74D2801	1st Edition 2015
	HMIBMPHI74D4801	1st Edition 2015
	HMIPCCP2BJ7D80C0NN0	1st Edition 2015
	HMIPCCP2BK7D80C0NN	1st Edition 2015
	TM901BMPHI74D2801	1st Edition 2015
	TM901BMPHI74D4801	1st Edition 2015
	DIA5ED2140501EN	2019-02-V9.0
Manual:	EIO0000002042	.06/2018-09
Instructions:	35015283	13
Test reports:	EN150925C03	2015-10-21
	150514001C	2015-10-20
	160616001C	2016-12-20
	Witnessed tests	2015-11-17
	15-07-EAT-072-E00	--
	VS-TV-041101-11	2015-11-01
	VS-TV-041101-12	2015-11-01
	VS-TV-041101-13	2015-11-01
	VS-TV-041101-14	2015-11-01
	VS-TV-050201-01	2016-02-01
	VS-TV-051122-06	2016-11-22
	17-03-EAT-070-E00	2017 (witnessed)
	1906S01V	2019-10-07
	1906S02V	2019-10-15
	1906S03V	2019-10-18
	1906S04V	2019-11-06
	1906S05V	2020-01-03
	1906S06V	2019-12-18
Validation Plan:	GDE4400600	1.20/2019-09-19
	1906S01C	2019-10-07 (C01)
	1906S02C	2019-10-07 (C02)

Type approval initial assessment report, DNV GL Kaohsiung 2015-11-26.

Tests carried out

Applicable tests according to class guideline DNVGL-CG-0339, November 2016.
Applicable tests for protected equipment according to IEC 60945, 4th edition (2002), except salt mist test.
Magelis / Harmony Modular PC:
Applicable tests according to class guideline DNVGL-CG-0339, December 2019.

Marking of product

The products to be marked with:
- manufacturer name
- model 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