

Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the LR Type Approval System.

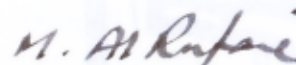
This certificate is issued to:

PRODUCER	CERTIFIED COMPUTER TECHNOLOGY AS
PLACE OF PRODUCTION	Glynitveien 33 - 1400 SKI Norway
DESCRIPTION	Intel Pentium 4 based maritime computer including marine kit.
TYPE	AMOS A4200M <i>For approval details and technical description refer to attached Design Appraisal Document No. 04/00022.</i>
APPLICATION	Marine and offshore applications in environmental categories ENV1, ENV2 and ENV3 as defined in Lloyd's Register Type Approval Test Specification No. 1: 2002 where the Test Specification is satisfactory for the intended operation.
SPECIFIED STANDARD	Manufacturer's Specification
ADDITIONAL TESTS	Low Temperature: - 15°C for 16 hours: IEC 60945 (Fujitsu Automotive Drive) Compass Safe Distance: Standard 1.2 m, Steering 0.85 m (IEC 60945)
OTHER CONDITIONS	Approved when fitted with the appropriate marine kit supplied by Certified Computer Technology.

"This Certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid certificate."

The Design Appraisal Document No.04/00022 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Certificate No.	04/00022
Issue Date	30 March 2004
Expiry Date	29 March 2009
Sheet	1 of 1



M.H.A. Rufaie
Marine Support Group
Lloyd's Register EMEA/London Office

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DESIGN APPRAISAL DOCUMENT

Date 30 March 2004	Quote this reference on all future communications DAPP/ MSG/ECE/TA/W00449219/MHR/O- 45286
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LLOYD'S REGISTER TYPE APPROVAL SYSTEM, 2002.

Issued to: **CERTIFIED COMPUTER TECHNOLOGY AS**

For: **INTEL PENTIUM 4 BASED MARITIME COMPUTER INCLUDING MARINE KIT**

Type: **AMOS A4200M**

TYPE APPROVAL CERTIFICATE No. **04/00022**

The undernoted documents have been reviewed for compliance with the requirements of the LR Type Approval System, 2002 and this Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

Request form	26.01.2004
Certified Computer letter	12.12.2003
Lloyd's Register Oslo memo	02.02.2004
User Manual A4200M Maritime Computer (Revision 1.0)	Undated
Certified Computer letter	25.03.2004

Data Sheets

Technology Summary (FUJITSU)	04.03.2003
A4200M: Intel Pentium 4	Undated

Drawings

21260-1	28.01.2003
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Technical Details

Motherboard	Intel. (845EB2L / 865GLCL)
CPU	Intel Pentium 4 or Celeron
CPU front side BUS	400/533/800 Mhz
Memory	Kingston, Apacer
Hard Drive	Standard: Hitachi Deskstar Temperature range: - 5°C to +70°C
Hard Drive 2	IEC 60945: Fujitsu Automotive drives Temperature range: - 15°C to + 70°
Floppy	Teac
Optical Drives	Slim line (Notebook type) CD, CD-RW, DVD or DVD-RW
Graphics	Matrox: G550 / G650
Network	Intel: PWLA8390MT, 8492MT or 8490XTL
IO	Low profile Sunix 2 or 4 port
Profi BUS	Siemens
Power supply	Pentium 4, 1U
Enclosure	CCT special design.