User Manual

PCM2-J19

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FCC Warning

Computing devices and peripherals generate, use, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions advised by ISIC A/S, may cause interference to radio communication.

The PCM2-J19 computer, manufactured by ISIC A/S, is designed to comply with the emerging generic EEC standards, that cover applications in maritime environment.

Classification

The computer is classified as Environmental condition "protected" acc. to EN60945 ed. 4.

Approvals

Approval according to EN60945 ed. 4; Maritime navigation and radio communication equipment and systems – General requirements.

ISIC A/S is complying with the WEEE directive within the European Union, stating that electronic and electric products must be collected separately. Products are marked according to the directive.

ISIC PCM2-J19 User Manual

Congratulations on your purchase of ISIC PCM2-J19. This short form manual is designed to get you started working with your new PCM2-J19.

Table of Contents

1 General considerations on Installation and Operation

The PCM2-J19 is designed to work fanless at conditions according to IEC 60945. However, keeping the temperature and vibration level at a minimum will extend the life time of the product. ISIC recommend operating this product at normal room temperature (20-25 °C), with the lowest level of vibration and humidity.

Installation of the PCM2-J19

When designing the cabinet/console for the PCM2-J19, please ensure that air can flow freely around the cabinet, in order to avoid any unnecessary rise in temperature. If it is not possible to have an adequate natural airflow, use a fan to force the airflow to be higher.
The PCM2-J19 can be mounted in all orientations.

2 Getting started

Please refer to the *PCM2-J19 connections* for location of connectors specified in this section.

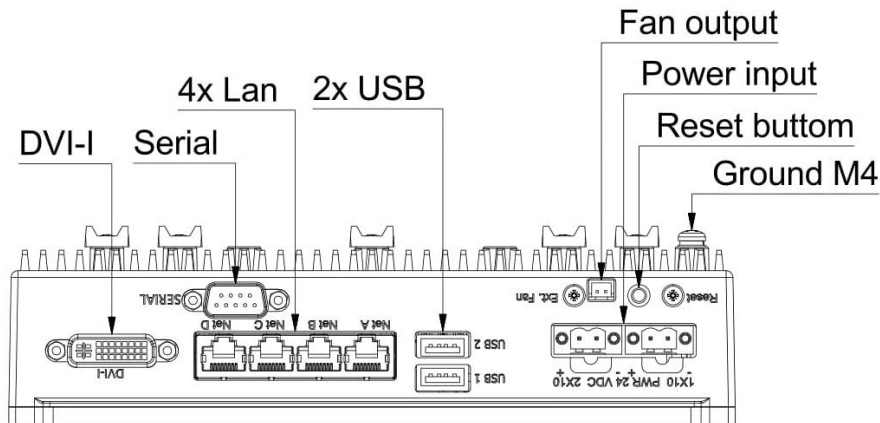Connect Keyboard/Mouse to the to the USB connectors.

Connect the monitor to the DVI connector.

Connect all other needed connectors ending with the Power outlet.

To power up the PCM2-J19, you need to press the power button (dependant on BIOS setting).
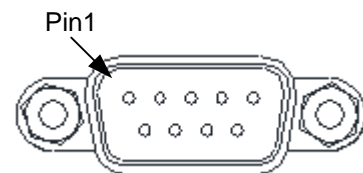
3   PCM2-J19 connections

Below is a view of connections to the PCM2-J19.

4   Connector pin-out

4.1   Serial (COM2)

Mating part: SUB-D 9 pole female, Norcomp 172-E09-20201 or equivalent.

Pin	RS-232	RS-422	RS-485
1	DCD	Tx-	D-
2	RxD	Tx+	D+
3	TxD	Rx+	
4	DTR	Rx-	
5	GND		
6	DSR		
7	RTS		
8	CTS		
9	RI		

COM2 settings RS232/422/485 is set in BIOS

4.2   Power input

The nominal input power voltage is 24V (18-36VDC). There are two independent galvanic isolated power inputs.

Mating part number: Weidmüller BLZP5.08HC/02/180F

Pin1
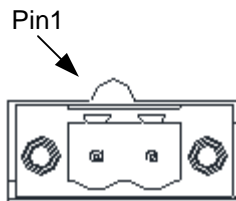
Pin	Power in
1	0VDC
2	24VDC

4.3   Fan output

Mating part: JST XHP-2 (housing), SXH-001T-P0.6 (terminal)

Pin1
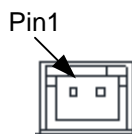
Pin	FAN out
1	12VDC
2	0VDC

5 Technical specifications

General

CPU:	Intel® Celeron® Processor J1900, 2.42 GHz (4 Cores / 4 Threads)
Chipset:	Intel® processor Core, Graphics and Memory Controller in a single system-on-chip (SOC) solution
Memory:	1 x SODIMM sockets with 1x 4GB DDR3L 1600MHz mounted *Up to 8GB DDR3L SODIMM*
Hard Disk Drive:	80GB Intel® S3500 SSD SATA *Optional sizes available*
Video:	Intel® HD Graphics controller on-CPU *DirectX* 11 and OpenGL 4.0 compliant* *Dual Independent display capable*
External Video out:	1 x DVI-I video output connector
Ethernet:	4 x 10/100/1000 Mbits/s Ethernet LAN on-board, (RJ45) with auto-negotiate *2 x Intel and 2 x Realtek*
USB:	2 x USB 2.0 (max 0,5 Amp per USB, max 5 Watt total)
COM:	1 x RS232/422/485 (configurable)
OS:	Windows 7, Windows 8, Windows 10, Linux

Power

Standard:	18-34VDC Galvanic isolated *Optional Dual input DC power, Galvanic isolated*
Power Consumption:	P_{typ} = 8 Watt, P_{max} = 15 Watt

Environmental

Operating Temperature:	-15 to +55 °C
Storage Temperature:	-25 to +70 °C
Relative Humidity:	8 to 95 % (non-condensing)

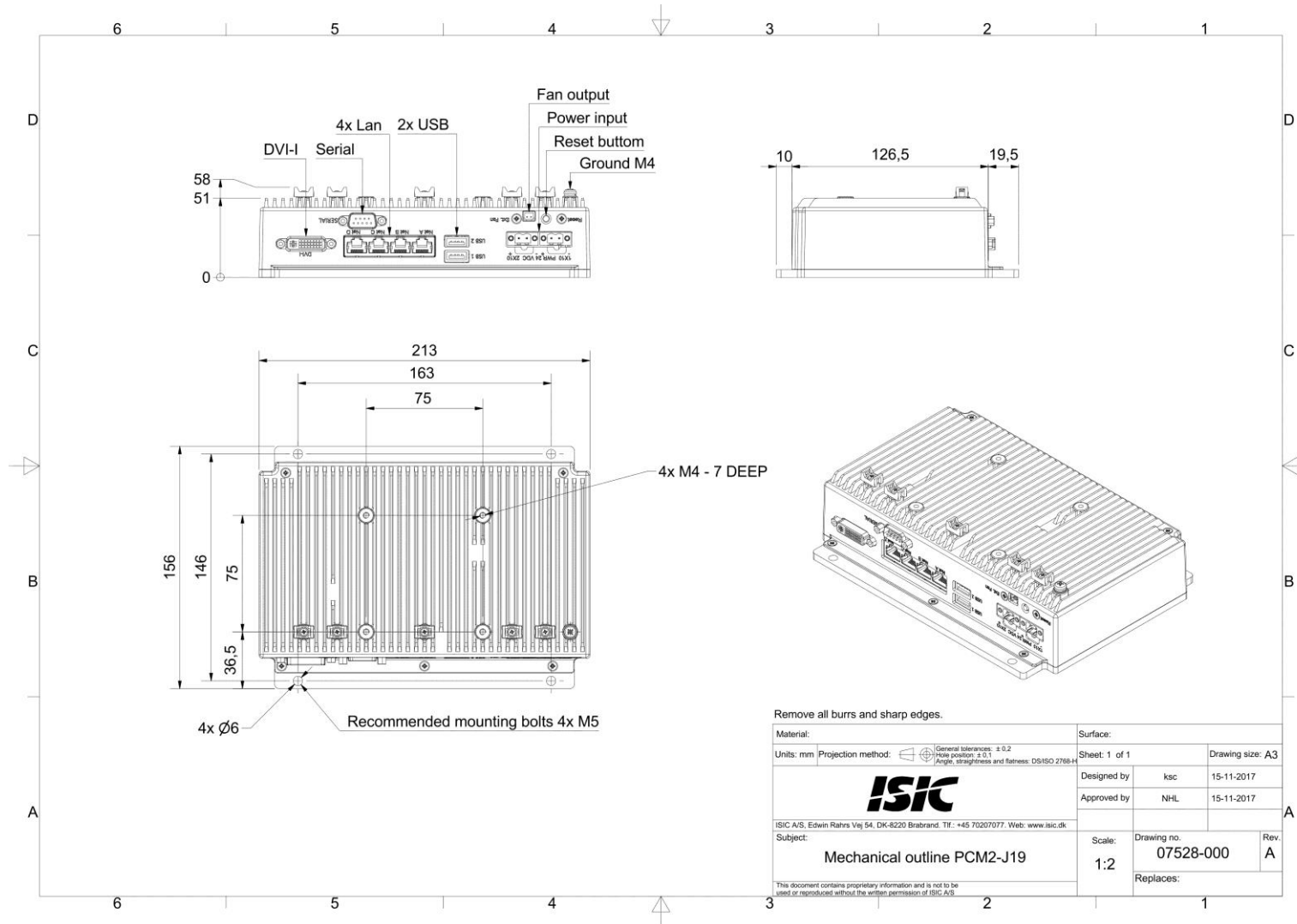## Approvals

Marine:	IACS E10 Rev. 6 & IEC 60945 Ed. 4
Type Approvals:	Pending *For marine class approvals – see www.isic-systems.com*

Dimensions

Size:	213 mm (W) x 156 mm (H) x 58 mm (D)
Weight:	App. 1,5 kg.
Optional Bracket:	Desk/ceiling-and wall-bracket (VESA 75x75mm)

6   Mechanical dimensions

7   Troubleshooting guide

Problem	Cause	Solutions
The PCM2-J19 won't start	- There is no power connected	- Connect the power cord
	- The polarity of the power is wrong	- Swap +24V and GND
	- USB power overload	- Read paragraph "General notes on USB"
The PCM2-J19 starts, but there is no picture on the screen	- The display DVI is not connected, or has fallen out	- Connect the DVI cable
	- Your brightness/contrast on the monitor is either at max or min level.	- Turn the brightness/contrast to the correct levels.

8   Servicing the unit

In case that the unit still fails after following the troubleshooting guide send the unit to ISIC for repair. There are no user serviceable parts inside.

9   General notes on USB

In the USB specification a max power consumption of 500mA on each USB port is defined. If you experience start- up problems, start by removing all USB devices, and then try to restart the PCM2-J19 again.

Faulty USB devices can also cause malfunction of your PCM2-J19.

10   ISIC info / Support

In case you have inquiries or problems with your PCM2-J19, you have a number of possibilities to get support.

Company name:	ISIC A/S
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Mail: www:	mail@isic-systems.com www.isic-systems.com
VAT number:	DK 16 70 45 39
Bank Name/Address:	Handelsbanken A/S Havneholmen 29 DK – 1561 København V Denmark
Bank Code: SWIFT: IBAN for DKK: IBAN for EUR: IBAN for USD:	0892 HANDDKKK DK53 0892 0001 0159 69 DK48 0892 0003 0026 19 DK26 0892 0003 0026 27
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Support:	Via homepage www.isic-systems.com under aftersales By mail to service@isic-systems.com During office-hours (Mo-Fr: CET 0800 - 1600) at +45 70 20 70 77
Service:	Before shipment for service Request Return Material Authorisation number at homepage www.isic-systems.com under RMA By mail to service@isic-systems.com

11 Revision history

Rev A	Jan 2018	Release