

SBOX-100-QM87 Fanless Embedded Computer System

Solutions

Features

- ◆ Fanless Marine Computer with 4th Generation Intel® Core™ i5 Dual-core Processor
- ◆ -15°C ~ +55°C Wide Temperature
- ◆ Isolation Protection
 - 4 x RS-232/422/485 isolated serial ports
 - Isolated 9 V~ 36V DC input
 - 2 x Isolated CAN-bus 2.0B
- ◆ 2 x 2.5" SSD bay with RAID 0/1 function
- ◆ Support IEI iRIS-2400 (IPMI 2.0 compliant)



Intel® Core™ i5 High Performance Computing Power in a Fanless Design

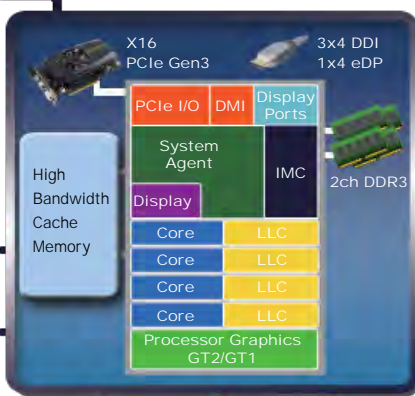
IEI's high performance marine solutions are built with the powerful Intel Core i5 CPU on fanless system architecture. Whether your application is general marine systems management, monitoring or conning systems, radar systems, or ECDIS navigation, IEI's marine computers will give you the most stable than ever.

- Improved CPU performance with Intel® 22nm 4th Generation Mobile Core™ i5-4400E 2.7 GHz processor
- Two 204-pin 1600/1333MHz dual-channel DDR3 SDRAM support up to 16 GB

Next Generation Intel® HD Graphics with DX 11.1, OpenGL 4.x, OpenCL 1.2

Fully Integrated VR

3 Independent Displays High Resolution DP v1.2, HDMI 1.4a



Built on 22nm process

Intel® Turbo Boost Technology

2 Ch DDR3L 1600 1/2 DIMM per Channel

Up to 4C and 8MB of Intel® Smart Cache

Intel® AVX 2.0 + Intel® AES new instructions and improvements



With IEI's fanless solutions, your vessels can avoid the bothersome of replacement of fan, increasing safety and efficiency for the crew and the entire ship.

Three independent aluminum heat sink helps the heat dissipation averagely, help the system efficiently achieve wide operating temperature between -10°C~55°C.

3 independent displays: HDMI, DVI, and VGA

Three simultaneous independent displays support via the onboard video output combinations of VGA, DVI and HDMI. This versatile combination of display output options makes the marine system ideal for multi-monitors required applications in bridge room.

Display 1



HDMI

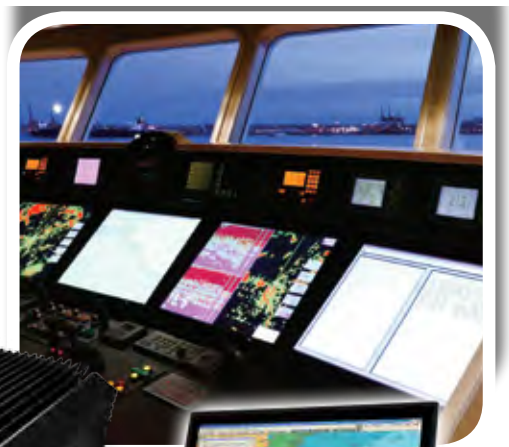
Display 2



VGA

DVI

Display 3



Multiple Isolated Ports for Comprehensive Protection against Electrical Surges

Ground loop and electric surges are common in the marine applications of electronic products, due to the dense placement of devices. These stray electrical signals can cause equipment damage or malfunction.

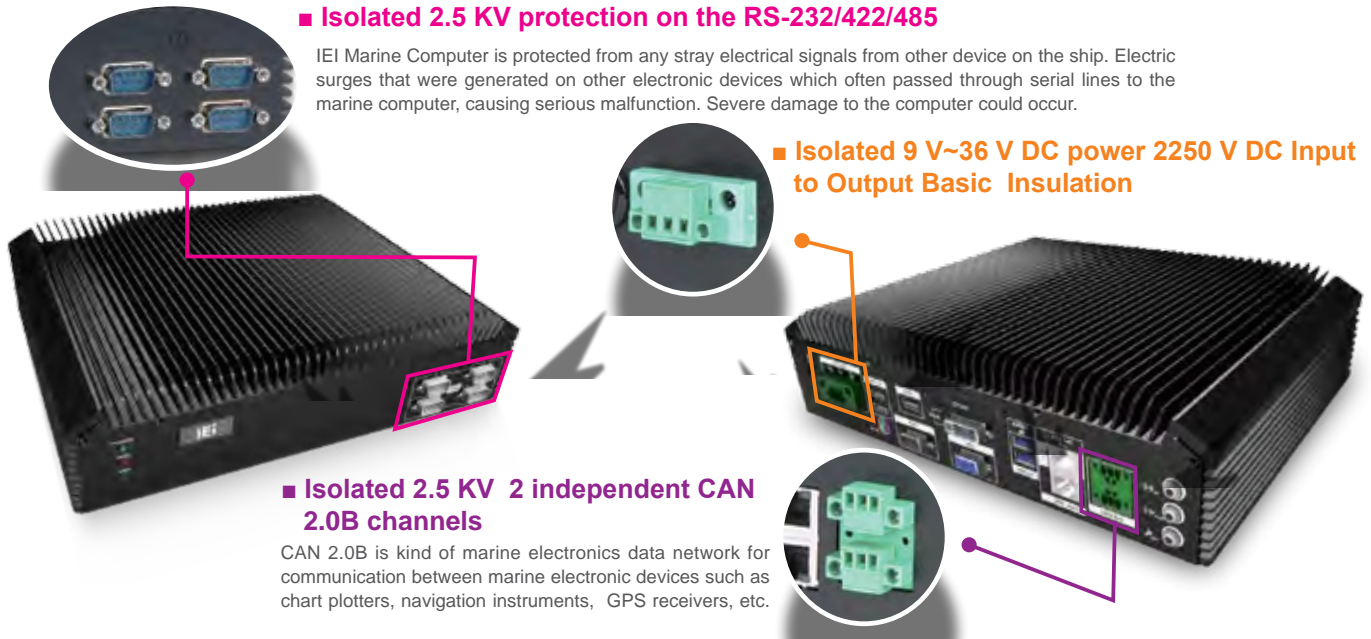
■ Isolated 2.5 KV protection on the RS-232/422/485

IEI Marine Computer is protected from any stray electrical signals from other device on the ship. Electric surges that were generated on other electronic devices which often passed through serial lines to the marine computer, causing serious malfunction. Severe damage to the computer could occur.

■ Isolated 9 V~36 V DC power 2250 V DC Input to Output Basic Insulation

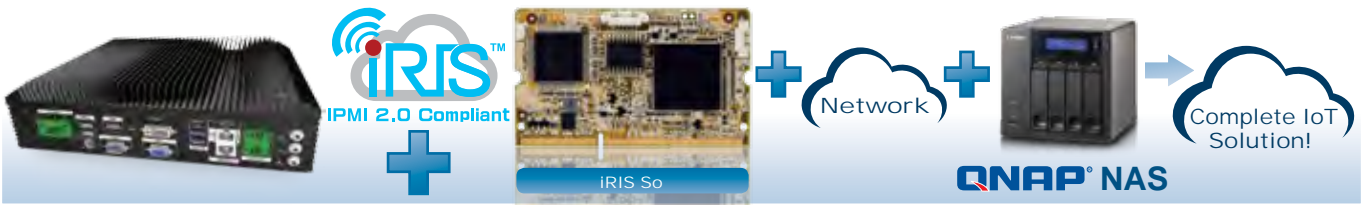
■ Isolated 2.5 KV 2 independent CAN 2.0B channels

CAN 2.0B is kind of marine electronics data network for communication between marine electronic devices such as chart plotters, navigation instruments, GPS receivers, etc.



IEI Remote Intelligent Management System

The SBOX supports iEi iRIS remote management, which helps users to manage multiple devices through single management interface and elevates work efficiency. iRIS solution only requires a module and Internet connection!



iRIS Key Feature	Detailed Functions	iRIS Key Feature	Detailed Functions
System health monitor	<ul style="list-style-type: none"> Hardware monitor Health log Event log 	Screen record	<ul style="list-style-type: none"> Remote video streaming record Event Trigger Setting & video record
Remote system maintenance	<ul style="list-style-type: none"> Remote BIOS update Remote OS recovery Remote KVM + One Key Recovery Remote out-of-band backup 	Remote power control	<ul style="list-style-type: none"> Reset Power Power Off Server — Immediately Power Off Server — Orderly Power On Server Power Cycle Server
Active alert & notice	<ul style="list-style-type: none"> Send instant system alerts via e-mail Send instant system alerts via SMS Send instant system alerts to management server 	Remote troubleshooting	<ul style="list-style-type: none"> Remote software update Remote OS installation & recovery Remote KVM Post code display
Remote device control	<ul style="list-style-type: none"> Fan control Remote KVM Remote setting BIOS 	Diagnose before dispatch	<ul style="list-style-type: none"> Health log analysis Event log analysis
		Group control	<ul style="list-style-type: none"> Group control