IPMI 2.0 Compliant

IPMI Remote Management in Embedded System

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iEi®

Introduction

Nowadays, employers keep searching different ways to cost down their expenses to make sure they can get the maximum benefit from their investments. Since more and more businesses start using smart devices in order to increase working efficiency, so how to manage those devices became essential issues that need to be solved. The iRIS solution is an easy way to help you save time on controlling your devices via Intranet and Internet.

What is iRIS?

Let's start from IPMI first before we talk about iRIS. IPMI is a standardized computer system interface used by system administrators for out-of band management of computer systems and monitoring of their operation. It is a way to manage a computer that may be powered off or otherwise unresponsive by using a network connection to the hardware rather than to an operating system or login shell. iRIS is a modularized IPMI product, which is designed and manufactured by IEI company. iRIS is compliant with IPMI 2.0, and supports out-of –band remote management to allow administrators to manage a system remotely in the absence of an operating g system or of the system management software. Thus, IPMI functions can work in any of all scenarios such as:

1. Before an OS has booted
2. When the system is powered off
3. After OS or system failure or BSOD
4. Cross platform and OS independent

Using a worldwide standardized IPMI 2.0 interface and protocol allows IEI's iRIS technology to assist administrators to remotely monitor and manage all IEI iRIS supported devices by group or individual via Internet communication.

Benefits from Using iRIS

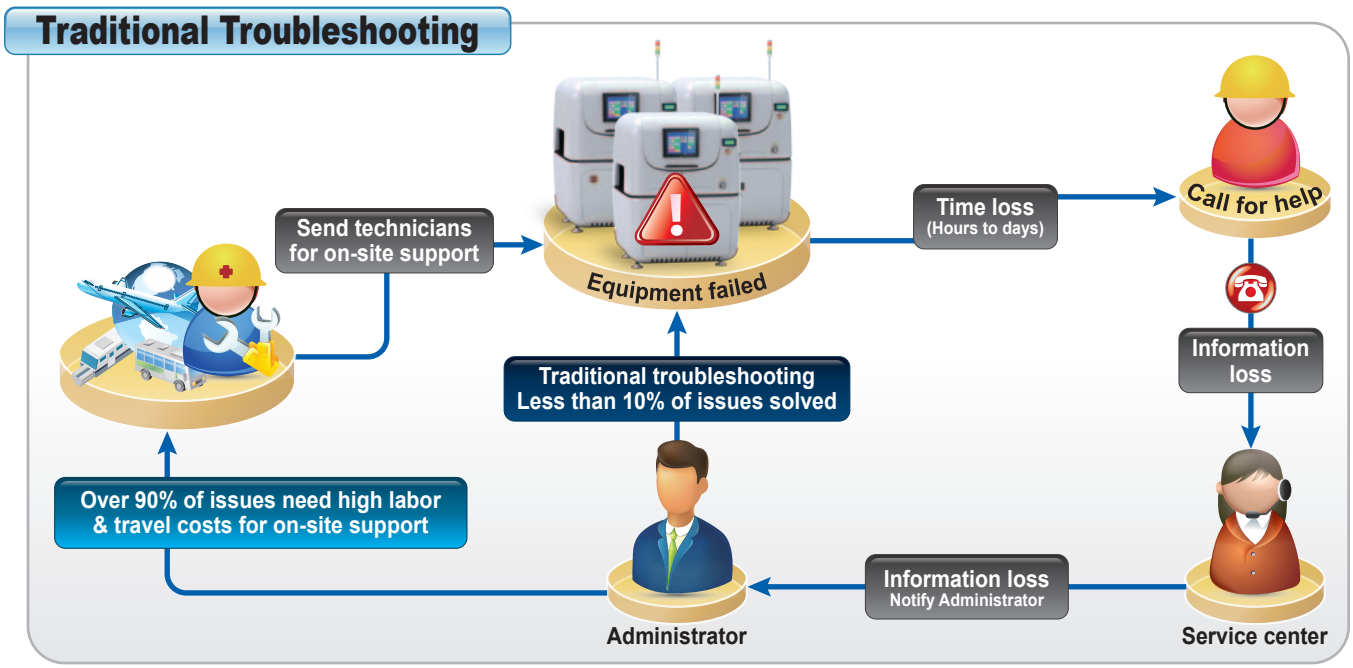
Comparing with traditional troubleshooting, iRIS remote troubleshooting has following advantages.

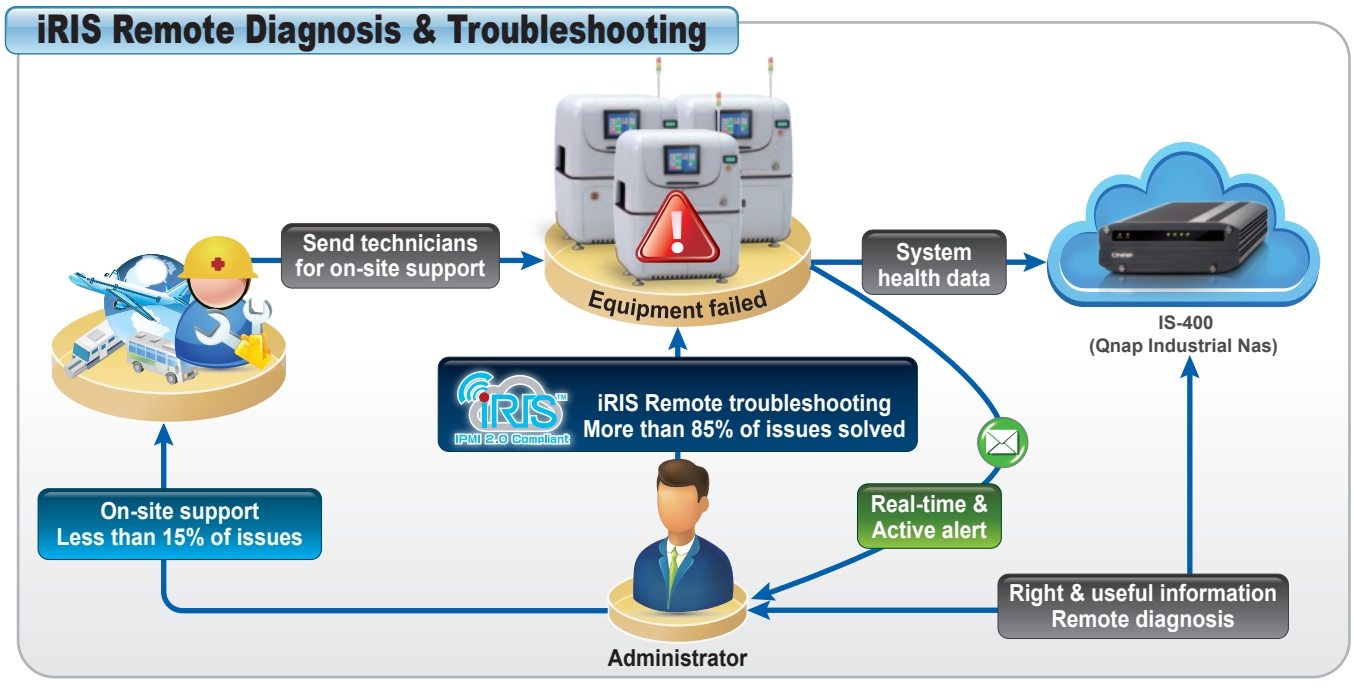
1. Time saving

When equipment failed, administrators are usually not able to discover the problem immediately in the traditional way. By using iRIS solution, people can respond instantaneously without wasting time. It can reduce the cost for repairing equipment.

2. Reduce labor and travel costs

According to system failure statistics, over 80% of system failures occur under software crash instead of hardware malfunction. iRIS remote diagnosis and troubleshooting can help administrators to reduce Mean Time to Repair (MTTR), decrease total management costs, solve more than 80% of issues via Internet, and remotely reboot to avoid costly site visits.



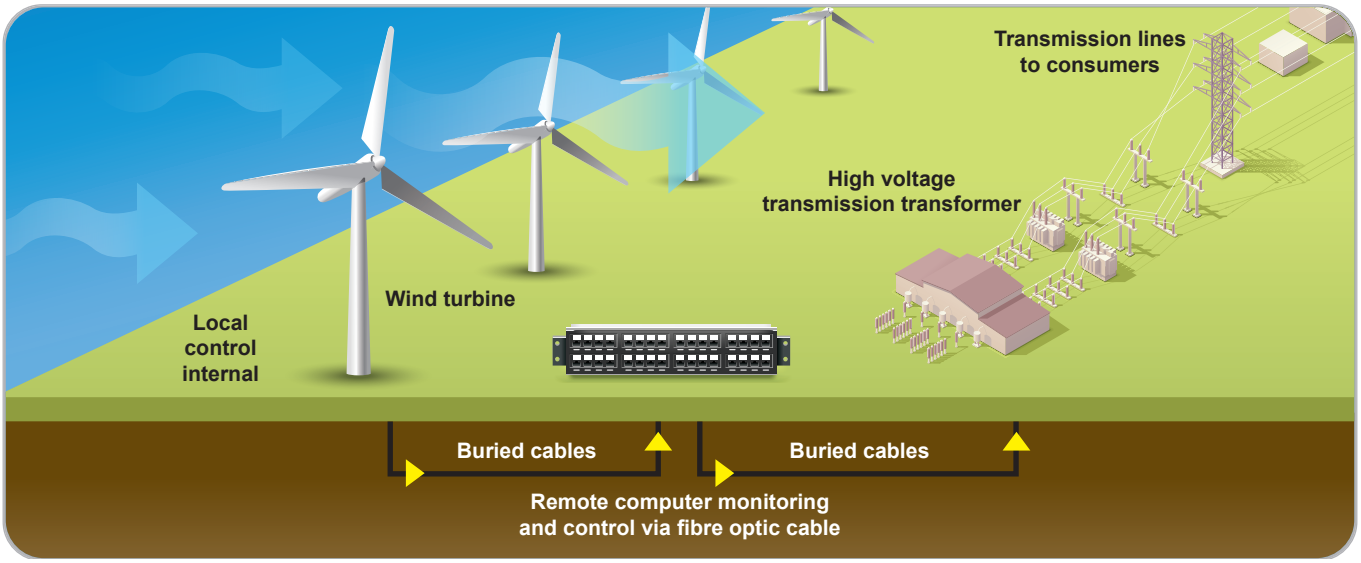


Application for iRIS

Application scenarios

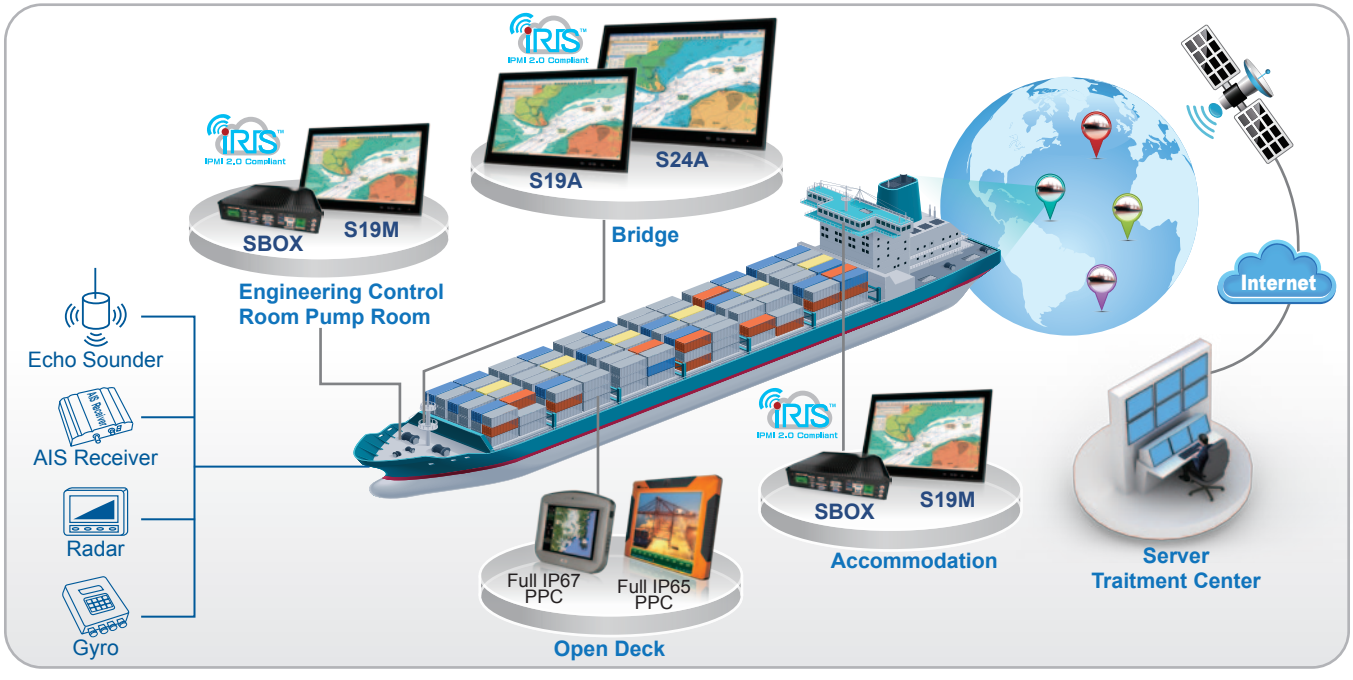
- **Energy Industry**

Energy industrial workstation may be located in a ruggedized environment with far away distance from support force. Wide range temperature and remote manageable computer are always required. IEI offers 4th generation Intel® processors, code-named BayTrail, to support hardware-based out-of-band management with low-power CPU options.



- **Traffic Control/ Fleet Management**

It is difficult to send out technical support for traffic and fleet management application due to the location limitation. The only way to solve the urgent issue is remote troubleshooting. Flexible expansion choice is also important to traffic control and fleet management for adding necessary IO cards. IEI TANK-860 provides IPMI, wide-range voltage, and ACC power support with 2/4/6 expansion slots to fulfill different types of needs for fleet management and high-performance traffic control applications.



- **Retail Industry**

  Retail industry relies on software more than pure hardware architecture. Maintenance cost is the highest cost since service location could be everywhere, and any shutdown will cause business lost. Graphics performance with hardware management is the requirement for retail application such as digital signage, vending machine, kiosk, and ATM machine. IEI offers AMD graphic solution with IPMI module to fulfill application needs.

Target market of IDS-200

- **Automation - Machine Vision**

  High-speed IO for connecting a variety of camera types is the first requirement for the machine vision application. Image data comparison capability is determined by system performance in relationship to automatic inspection and analysis. IEI embedded servers support high-performance Intel® Xeon CPU, and provide rich PCIe bus options, which are ideal for the machine vision application.

Conclusion

As I mentioned in the introduction, more and more devices need to be organized by a smart way. iRIS module is able to support a variety of working environments, and to run in different operating systems. Moreover, iRIS solution can not only help you to manage devices, but also bring more convenience into your business for increasing working efficiency and reducing system failure probability.

IEI iRIS Solution

Intel® Haswell projects		
Project	**Form Factor**	**IPMI Solution**
SPCIE-C2260-i2	PICMG 1.3	iRIS-2400
PCIE-Q870-i2	PICMG 1.3	iRIS-2400
IMBA-C2260-i2	ATX	iRIS-2400
IMBA-Q870-i2	ATX	iRIS-2400
IMB-Q870-i2	microATX	iRIS-2400
IMB-H810-i2	microATX	iRIS-2400
KINO-DQM871-i1	Mini-ITX	iRIS-1010
NANO-QM871-i1	EPIC	iRIS-1010
WAFER-ULT-i1	3.5"	iRIS-1010
Intel® Bay Trail		
KINO-ABT-i2	Mini-ITX	iRIS-2400
NANO-BT-i1	EPIC	iRIS-1010
WAFER-BT-i1	3.5"	iRIS-1010
AMD R-series		
KINO-DA750-i2	Mini-ITX	iRIS-2400
KINO-AA750-i2	Mini-ITX	iRIS-2400

AMD G-series		
Project	**Form Factor**	**IPMI Solution**
KINO-KBN-i2	Mini-ITX	iRIS-2400
NANO-KBN-i1	EPIC	iRIS-1010
WAFER-KBN-i1	3.5"	iRIS-1010
Embedded Box		
IDS-200-i2	AMD R-series (A70)	iRIS-2400
TANK-6000-i2	Intel® Haswell (C226)	On-board iRIS-2400
TANK-760	Intel® Haswell (HM86)	iRIS-2400
TANK-860	Intel® Haswell (HM86)	iRIS-2400
TANK-801	Intel® Bay Trail (J1900)	iRIS-2400
DRPC-120	Intel® Bay Trail (E3845)	iRIS-2400
Panel PC		
PPC-FxxA-H81	Intel® Haswell (H81)	iRIS-2400
PPC-FxxA-BT	Intel® Bay Trail (J1900)	iRIS-2400
POC-W22A-H81	Intel® Haswell (H81)	iRIS-2400
AFL3-XXA-BT	Intel® Bay Trail (J1900)	iRIS-2400
SxxA-QM87	Intel® Haswell (QM87)	iRIS-2400

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