Success Stories

Industrial Computing for Energy of Tomorrow

Fanless embedded computers with up to 6 LAN ports & Extended temperature

Background

Natural gas, the cleanest burning fossil fuel, has formed an increasingly important role in meeting the growing global demand for energy while helping to mitigate climate change. Natural gas is plentiful, but some of its resources are in remote locations. Transporting gas long distances by pipeline can be costly and impractical the solution. The liquefied gas process will shrink its volume to about 600 times, providing easier, more economical, and safe transportation by ship. When the boat arrives at its destination, the Liquified Natural Gas (LNG) is transferred to a regasification plant where it is heated and returned to its gaseous state to be transported by pipelines to customers providing cleaner-burning natural gas and energy for homes and Industry.

Officers and engineers aboard an LNG ship aboard are currently extremely hectic individuals. They need to get their hands on real-time, easy-to-use information from the vessel's systems along with exact private metrics. Optimizing fuel performance should not take over other tactical in-the-moment decisions, to keep sailing as safely as feasible with their critical cargo.

Winmate embedded computers are industrial PCs built on single-board computers and made for vast release in application-specific environments. Our fanless embedded systems stress stability and durability and provide an incredibly dependable remedy for your most remote locations. These systems offer an excellent balance of performance, with up to 6 LAN ports and an Extended temperature level. Get the up-to-date information you need to track the location, improve planning, and ensure compliance while ensuring that your goods are transported in optimal conditions to minimize waste. Making sense of large sets of complex data has become paramount to ship owners and operators with an eye on effective decision-making. For its part, the platform through over three billion measurements every day from hundreds of vessels. Its database also has access to over 140,000 sea days of real-time data.

Connect the maritime IoT with Winmate fanless embedded computers

Winmate understands how fragmented the LNG sector for the marine transportation industry is, from the number of parties involved and the number of solutions deployed, including emerging fanless embedded computer products. At Winmate, we designed and developed open, interoperable, and modular IoT solutions customized for the renewable energy and shipping environment.

The proposed products are certified safe by international regulations:

- ATEX Zone 2 fanless embedded system ITMH100-EX
- Maritime embedded PC I330EAC-ITW

Industrial computing solutions at land, sea, and belowdecks

Rich I/O ports and six ethernet ports

LNG ships are equipped with sophisticated leak detection technology, emergency shutdown systems, advanced radar and positioning systems, and numerous other technologies designed to ensure LNG's safe and secure transport.

To fulfill the diverse needs of LNG sea freight, Winmate offers resilient fanless embedded computer that comes with rich I/O interfaces supporting multi-video output, wide-range power input, expansion port, USB, serial port RS232/422/485, and six GbE LAN ports (vary by-products) for massive data processing.

Modular and robust IoT solution

Winmate industrial computer is modular and offers customers the flexibility to choose either an end-to-end solution or only the parts of the solution that is needed. Winmate M-series Box PC product family supports modular design to ensure easy integration with diverse platforms. The modular industrial computers allow the embedded box PC modules to be interchangeably combined with Winmate's display modules to provide comprehensive platform solutions for industrial monitor systems and fulfill various demands of diverse applications in liquefied natural gas, maritime, renewable energy, and various other industries.

Quiet cooling and fanless operation

Its closed-design metal housing with fanless design ensures long reliable operation, preventing dust or other contaminants from interfering with components. The silent heat dissipation design also allows the system to operate in a wide range of temperatures without a loss in performance, effectively prevents the noise inside the machine caused by fan operation, and forgoes vulnerable ventilation openings.

Best reputation in providing marine IoT solutions

For nearly three decades, Winmate Inc. has provided robust and reliable solutions to our customers and partners in the maritime sector. Marine solutions from Winmate are internationally recognized and certified, with a proven track record of satisfying all types of scenarios, applications, and environments for maritime professionals and organizations. We are the preferred supplier of marine computers and displays, the leading OEMs, especially for marine ECDIS, radar, automation, and communication. The robust and elegant designs combined with years of experience producing marine electronics solutions have made Winmate Inc. the forefront innovator in this field.

International approvals for use in hazardous areas

Besides the marine certification, Winmate also offers IoT solutions for hazardous locations such as Class I Division 2, Groups A, B, C, D, T5, IECEx/ATEX Zone 2 applications, pharmaceutical, healthcare, public safety, military and defence, and many more.

Find out more about Winmate solutions.

Related Products

Winmate ITMH100-EX
Embedded System

Intel Core i5-1135G7
Passiv gekühlt
4 GB RAM

Winmate I330EAC-ITW
Marine System

Embedded System
Intel Core i5-1135G7
Passiv gekühlt
4 GB RAM