AVIONICS INTERFACES

INNOVATIVE   EXPERIENCED   RESPONSIVE   EMBEDDED, TEST & SIMULATION

Ballard ||||||
T E C H N O L O G Y

ASTRONICS
CORPORATION

Your avionics
databus connection

Ballard Technology pioneered databus interface technology over a quarter-century ago.

Get the best solutions

You have problems to solve. Shrinking budgets and declining workforces only increase that challenge. What you need is the help of a seasoned expert with broad application knowledge and a well-equipped product portfolio. You need Ballard Technology, the industry-leader for reliable interface solutions and world-class customer support. We deliver proven solutions that minimize your risk and ensure the success of your program.

Stay within your budget

Your budgets are tight. To control costs, you not only need the right solutions, but you need to avoid problems that lead to cost overruns. With Ballard Technology, you get thoughtfully designed products that integrate and perform the way you expect—with no surprises. Our hardware and software solutions feature high reliability and long service life to save you money now and over the life of your program.

Finish projects on time

Your deadlines are critical. You need a partner that helps you achieve your goals, not one that holds you back. You can depend on Ballard Technology. We help you with products that arrive when you need them—most are shipped from our extensive stock. We help you with responsive and knowledgeable support—both before the sale and for the life of the product. We help you with quality products you can count on to work right the first time—and every time.

Astronics Ballard Technology is committed to your success!
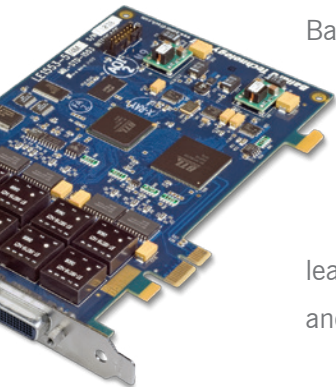
Your problems are solved

Embedded products

Embedded products from Ballard Technology solve avionics processing and interfacing problems on aerial platforms, ground vehicles and ships. Whether you need rugged box-level systems or high-performance interface cards, our versatile embedded products are ready for any challenge.
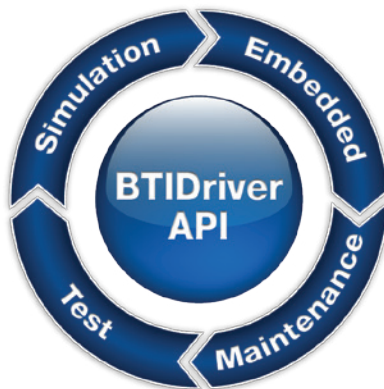
Test and simulation products

Ballard develops and manufactures reliable test and simulation interfaces for all standard protocols, including MIL-STD-1553, ARINC 429/708/717/664 (AFDX®), Ethernet, serial and discrete. When paired with CoPilot®, our industry-leading test & analysis software, they provide an easy and powerful way to interact with avionics databuses.

Solutions that migrate with your project

As projects progress and evolve, it is often necessary to migrate from one interface platform or operating system to another. Ballard products share a universal API, so you won't need to rewrite code if things change. This software portability speeds deployment and protects your valuable programming investment.

BTIDriver API

Simulation · Embedded · Maintenance · Test
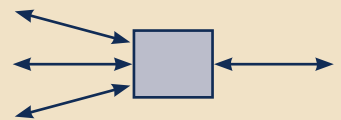
Typical uses

Data/protocol conversion

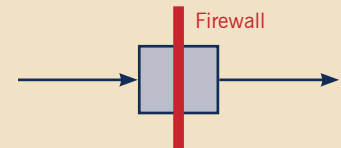Enable incompatible equipment to work together by converting databus protocols, message formats, data and attributes.

Data concentration/separation
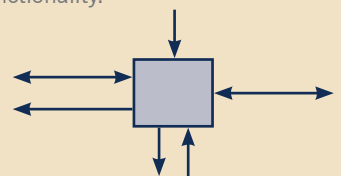
Serve multiplexed and demultiplexed avionics data.

Domain isolation

Isolate and protect critical systems from interference and corruption by non-critical systems.
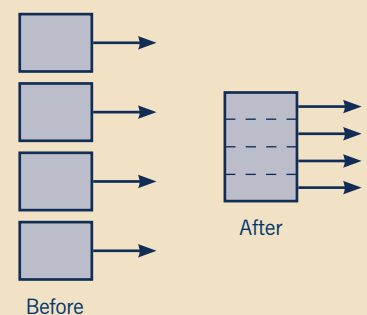
Firewall

Operational processing

Execute software to provide interactive control, data processing and interface functionality.

LRU consolidation

Combine the functions of multiple LRUs into a single partitioned device.
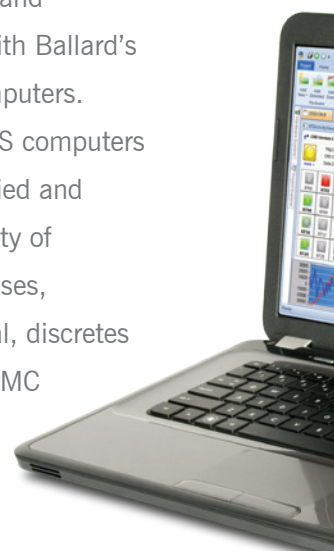
Before

After

Thoughtfully designed products

COTS solutions

Shorten procurement times and speed program development cycles with Commercial Off-The-Shelf (COTS) solutions from Ballard Technology. These readily-available products provide value, flexibility and a choice of board, box and software solutions to meet all your project needs.

Versatile avionics computers

Solve your toughest computing and interfacing problems with Ballard's rugged avionics computers. These versatile COTS computers are rigorously qualified and include a wide variety of I/O–avionics databuses, Ethernet, USB, serial, discretes and more. Internal PMC slots provide further expansion capability.

Ballard avionics computers are small, lightweight and loaded with capabilities for easy integration into today's modern aircraft, UAVs, and ground mobile platforms.

Rugged Ethernet switches

Increase system connectivity of Ballard avionics computers or any embedded system with our rugged PMC Ethernet switch cards. These switches are also available in flight-ready boxes for a robust stand-alone solution.

Direct Connect™ interfaces

Eliminate costly and damage-prone aircraft test cables with Ballard's innovative Direct Connect devices. They deliver our proven COTS avionics interface technology in a rugged package that attaches directly to your LRU or aircraft interface connector.

Innovative USB mass storage

Capture and protect your critical data with the industry's most rugged USB data storage solution. Ballard's Toe Drive™ is a removable flash storage device designed specifically for the demanding needs of military and aviation users.

Portable USB interfaces

Connect your PC laptop, desktop and tablet computers to avionics databuses with Ballard's pocket-sized USB interfaces. Ease of use, versatility and comprehensive databus functionality have made these rugged adapters the industry favorite for avionics test, analysis and simulation in the lab and in the field.

Easy-to-use software

Be more productive with supporting software from Ballard Technology. CoPilot® enables you to interact with avionics bus data without writing your own code. This intuitive graphical software is the leading productivity tool for databus analysis and simulation. Alternatively, comprehensive API libraries and numerous example programs simplify and speed the development of custom applications.

Interface cards

Enable computers and embedded systems to communicate with avionics databus networks. Ballard interface cards provide flexibility, performance and value. Models are available with a choice of protocols, channel counts and capabilities for use on industry-standard host platforms.

Ballard produces interfaces for:

- **MIL-STD-1553**
- **ARINC 429**
- **ARINC 708**
- **ARINC 717**
- **ARINC 664 (AFDX®)**
- **Ethernet**
- **Serial**
- **Discrete I/O**
- **And more**

Test interfaces

Validate, test and debug commercial and military avionics equipment and systems with Ballard's industry-leading databus interfaces. From simple single-channel to sophisticated multi-protocol solutions, we offer a broad selection of interface cards and peripheral interfaces (Ethernet and USB controlled) for all stationary and portable testing applications.

Simulation solutions

Complete your simulation system with a high-performance databus interface from Ballard Technology. These powerful interfaces are the preferred choice for training systems, system integration labs (iron birds), and flight simulators.

At Astronics Ballard Technology, our passion is quality. Quality in design, technology, products and support.

Customers have frequently described Ballard as having "the products that work"

…and they keep on working.

REGISTERED COMPANY
AS 9100
ISO 9001

Ready solutions

Save time and money with application-specific solutions from Ballard Technology.

Aircraft Interface Devices (AID)

Solve avionics system integration and compatibility problems with Ballard's versatile Aircraft Interface Devices. These rugged units are an essential part of many avionics upgrades, such as electronic flight bag (EFB) and in-flight entertainment (IFE) systems, where they serve avionics data while protecting aircraft control domains from interference and corruption.

Data recorders

Capture and store avionics data for flight testing, training, mission analysis, maintenance, and more.

Test solutions

Test a wide variety of aircraft systems with Ballard's convenient portable solutions.

Data loaders

Transfer data from your choice of media or network location to avionics systems with new data loading solutions from Ballard Technology.

Custom solutions

Get a solution tailored to your needs with a preconfigured or modified COTS product from Ballard Technology.

Aircraft Interface Devices from Ballard feature low SWaP (Size, Weight and Power) and are rugged enough to survive high-vibration helicopter environments.

We can help!

Commercial, military and government customers around the world have come to rely on Ballard's innovative solutions for avionics databus test, simulation and embedded applications.

Contact us today to get started

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