

Avionics Interfaces for Embedded Systems

Rigorously Qualified COTS Solutions

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

software solutions to meet all your project needs.

Reduce Project Risk

With Astronics Ballard Technology, you get thoughtfully designed products that integrate and perform the way you expect—with no surprises. Plus, we provide responisve and knowledgeable support—both before the sale and for the life of the product.

Control Program Costs

To control costs, you need the help of a seasoned expert with broad application knowledge and a well-equipped product portfolio. Our hardware and software products feature high reliability and long service life to save you money now and over the life of your program.

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

TYPICAL USES

Data/protocol conversion

Restore equipment compatibility by converting databus protocols, message formats, data and attributes.



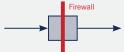
Data concentration/separation

Serve multiplexed and demultiplexed avionics data.



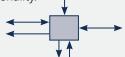
Domain isolation

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



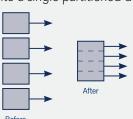
Operational processing

Execute software for interactive control, data processing and interface functionality.



LRU consolidation

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





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	Product Family	Description	Platform	Protocols (max channel count*)	
()	NG3 Series	Rugged I/O computers with 64-bit Intel processing, flexible module-based I/O, and maintenance removable drives	Stand-alone, Ethernet	MIL-STD-1553 (12) ARINC 429 (24) ARINC 708 (6) ARINC 717 (3)	CANbus 2.0 (1) Serial (12) Discrete I/O (112) Ethernet Switch (24)
Q: Q	NG2 Series	Rugged I/O controllers with 64-bit Intel processing, flexible module-based I/O, and maintenance removable drives	Stand-alone, Ethernet	MIL-STD-1553 (8) ARINC 429 (16) ARINC 708 (4) ARINC 717 (2)	CANbus 2.0 (1) Serial (8) Discrete I/O (80) Ethernet Switch (16)
	AB3000 Series N	Small form-factor COTS mission computers with 64-bit Power Architecture processing and integrated Gigabit Ethernet switch	Stand-alone, Ethernet	MIL-STD-1553 (4) ARINC 429 (12) ARINC 717 (2)	Serial (2) Discrete I/O (48) Ethernet Switch (8)
	AB3000 Series 1 & 2	Highly flexible Intel-based I/O computers for demanding aerospace and ground mobile environments	Stand-alone, Ethernet	MIL-STD-1553 (4) ARINC 429 (24) ARINC 708 (4) ARINC 717 (4)	CANbus 2.0 (1) Serial (4) Discrete I/O (48) Differential I/O (8)
	AB2000 Series	Rugged I/O computer/interface devices featuring a wide variety of expansion capabilities	Stand-alone, Ethernet	MIL-STD-1553 (4) ARINC 429 (24) ARINC 708 (4) ARINC 717 (4)	Serial (2) Discrete I/O (48)
	AB1000 Series	Small, lightweight embedded computers with built-in interfaces for avionics databuses and a variety of standard I/O types	Stand-alone, Ethernet	MIL-STD-1553 (1) ARINC 429 (6) Serial (2) Discrete I/O (10)	
	ME1000 Series	Rugged miniature cards enable space-constrained embedded systems to interface with avionics databuses	mPCle	MIL-STD-1553 (2) Serial (1) Discrete I/O (8) Differential I/O (2)	Contact factory for ARINC 429/717 model availability
	Mx5 Series	Avionics databus interface cards with high channel counts and single- or multi-protocol models	PMC, XMC	MIL-STD-1553 (8) ARINC 429 (22) ARINC 708 (4) ARINC 717 (4)	Discrete I/O (6)
	PE1000 Series PM1553-5 PM429-2	Rugged cards enable embedded computers to interface with MIL- STD-1553, ARINC 429, or multiple avionics databuses	Models for: PCIe/104 PCI/104-Express PC/104-Plus	MIL-STD-1553 (4) ARINC 429 (20) ARINC 708 (4) ARINC 717 (4)	EBR 1553 (1) Serial (4) Discrete I/O (16) Differential I/O (4)
Printed Circust Board Assembly (PrObA)	USB to Avionics Interface Boards	Compact databus interface PCBAs (Printed Circuit Board Assemblies) provide an easy USB alternative to traditional embedded card types	USB 2.0	MIL-STD-1553 (2) ARINC 429 (16) ARINC 708 (4) ARINC 717 (4)	EBR 1553 (1) Serial (4) Discrete I/O (8) Differential I/O (4)
	Ethernet Switch Card	A full-featured Ethernet switch implemented on a rugged PMC card	PMC	Gigabit Ethernet (1, plus 1 host port/NIC) 10/100 Mb/s Ethernet (8)	

Get Started Today

For additional details, contact:

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Optional Services

Additional Charges may apply

COTS Program Engagement

Configuration and obsolenscence management

Extended Warranty

Multiple options to extend product warranty coverage

^{*} Maximum channels per protocol. Combining protocols may reduce channel counts.