Shaping the Globally Connected Aircraft

Feature rich IoT Data Driven Solutions that go Beyond IFE&C



- ▶ Added intelligence and connectivity: Through Next Gen Wireless Technology and Smart Devices
- ➤ Creating new revenue streams:

 Brought Securely and Reliably to Each Personal Device
- ▶ Reduce complexity and cost: With Adaptable, Scalable and Modular Open Architecture Platforms
- ➤ Enhancing Connectivity: Through Multi-Orbit Solutions



> IFE&C timeline

Major milestones & Kontron involvement

Experience

- **>** 30 years of engineering design and expertise in avionics products
- ➤ Installation on over 5,000 aircraft

Flexibility

- **>** Leader in embedded products, which are building blocks of our avionics systems
- ➤ Unique ability to control product life cycle
- **>** Both standard products and project based solutions

> Commitment

- ➤ Long-term focus on IFE&C industry
- ▶ Global deployments on Boeing, Airbus, regional and business jets

> Innovation

> Open architecture approach, roadmap based on industry standards

DEPLOYMENT

➤ Hardware & software expertise for avionics systems

▶ Certification

- **>** FAA documentation, processes and certification
- **>** Operates FAA and EASA certified repair stations

> Over 5000 aircraft deployed worldwide

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Airbo Serv	orne Transceiver er Unit (ATSU)	ATG Communication Unit (AACU)	Server Management Unit (SMU) Modem Data Unit (MDU)	ACE Flight Server Cab-n-Connect 802.11	ACE Flight Server 6 Cab-n-Connect 802.11	ACE Flight Server 4600 ACE Flight Server 904 Cab-n-Connect A100	ACE Flight 4780 MODMAN ACE Flight Server 4608 ACE Flight Server 4600 ACE Flight 1600 Gateway Router ACE Flight Server 904 Cab-n-Connect A100 Cab-n-Connect P100	Cab-n-Connect: P100 Portable A200 (CWAP) A201 ARINC 628 ACE Flight MODMAN: ACE Flight 4780 (Single) ACE Flight 4783 (Dual) ACE Flight 2780 (AMU) ACE Flight Server: ACE Flight 4608 ACE Flight 1600 ACE Flight 905		
	2005	2007	2009	2011	2013	2015	2019	2022	ON AIRCRAFT	

➤ Reducing Complexity & Cost Through adaptable, Scalable open **Architecture Platforms**

IFE&C certified platforms

Open architecture for wireless cabin & connectivity

Kontron's 30-year experience in 5,000+ commercial and business jet installations worldwide demonstrate our expertise in engineering avionics products resulting in the industry's most advanced, cost effective and certified IFE& Copen platform solutions on the market. Our wirelessconnectivity products propel the future of the loT "connected aircraft" to go beyond passengerentertainment to data driven solutions that create greater operational efficiencies and new revenue streams.

Broaden your IFE&C configuration options

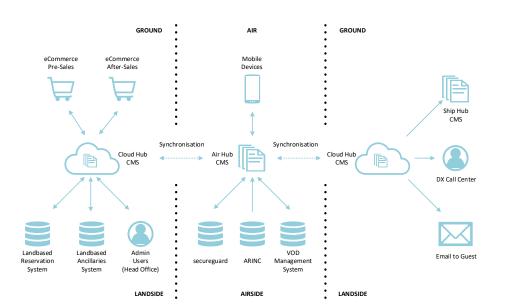
- > Fully integrated avionics server and cabin WiFi solution
- ➤ Easily adaptable and scalable
- ➤ Simplify content delivery and management
- **▶** Enable delivery to passenger wireless devices
- ➤ Provide greatest flexibility and affordability with open architecture and modular approach
- ▶ Lower maintenance and operating costs

Kontron Avionic Solutions powered by SGOS

SGOS is a highly flexible OS giving the capability to integrate, maintain, operate and monitor any user defined application required to support an avionics business model. It allows easy integration of your application in either containerized or virtual machine form.

SGOS supports compute, network and storage via a highly sophisticated & configurable resource manager, giving easy access to the hardware via the service bus contained within the highly configurable middleware.

SGOS offers a broad range of system applications to support many different usage scenarios. Typical scenarios are session management for IFC, SNMP for hardware monitoring, firewall for security, and many more.



> Connectivity & in-Flight Entertainment



➤ All in a secure environment

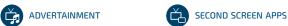


E-READER

Business jet systems







> Satellite modem managers

> Flight servers for media/connectivity



Software solutions



➤ Portable in-flight wireless entertainment system



➤ Cabin wireless access points











➤ Support & Services

Power Solutions

Protect your technology investment with Kontron

As a trusted technology innovator and global solutions provider, Kontron extends its embedded market strengths into a services portfolio for Avionics, allowing companies to break the barriers of traditional product lifecycles. Proven product expertise coupled with collaborative and highly-experienced support enables Kontron to provide exceptional peace of mind to build and maintain successful avionic products.

- Certified Repair Center
- Systems Integration Lab
- > Training/Installation Support
- ➤ Extended warranty
- ▶ Program management/Professional Services
- > Technical Suppor

➤ Kontron's Involvement

Kontron is actively involved in the following groups:

- ARINC
- Seamless Air Alliance
- APEX
- Aéro Montréal
- NBAA















About Kontron

Kontron is a global leader in IoT/Embedded Computing Technology (ECT) and offers individual solutions in the areas of Internet of Things (IoT) and Industry 4.0 through a combined portfolio of hardware, software and services. With its standard and customized products based on highly reliable state-of-the-art technologies, Kontron provides secure and innovative applications for a wide variety of industries. As a result, customers benefit from accelerated time-to-market, lower total cost of ownership, extended product lifecycles and the best fully integrated applications.

For more information, please visit: www.kontron.com

About the Intel® Partner Alliance

From modular components to market-ready systems, Intel and the over 1,000+ global member companies of the Intel® Partner Alliance provide scalable, interoperable solutions that accelerate deployment of intelligent devices and end-to-end analytics. Close collaboration with Intel and each other enables Alliance members to innovate with the latest IoT technologies, helping developers deliver first-inmarket solutions.

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