ARINC-664 Protocol Training is designed for professionals engaged in all aspects of ARINC 664 protocol networking, including test engineers, design engineers, technical product/field support, and network administrators.

AIT’s industry-leading ARINC 664 experts are now offering a training course on practical implementation of the ARINC 664 protocol, the baseline of an AFDX® network. The training course is based on the latest ARINC 664 standards documents and AIT Engineers’ years of real world experience working with ARINC 664 networks. Our ARINC 664 Protocol Training covers the ARINC 664 standard, its implementation, as well as comparisons with standard IEEE 802.3 Ethernet. Hands-on lab time with actual ARINC 664 end-systems and switches is included.

Course Topics:
- ARINC-664 End-System Operation
- Virtual Link Definition
- Bandwidth Allocation Gap (BAG) explanation
- Redundancy Management
- Traffic Shaping and Network Jitter
- ARINC-664 Frame Characteristics
- ARINC-664 Switching Operation
- ARINC-615A DataLoading Operation
- ARINC-665 Media Set Building
- SNMP operation in ARINC-664 networks
- ARINC-664 End-System testing

SIMPLE, INTUITIVE EXPLANATION
The ARINC 664 Protocol Training course provides the student with a detailed understanding of how the ARINC 664 network operates. End system deterministic data movement, flow control, and frame structure are defined during class instruction and then demonstrated with actual equipment. Students will be able to easily configure and execute ARINC 664 network operations using AIT’s end system hardware and switches.
WHAT YOU WILL LEARN
Upon completion students are able to:

- Identify the basic features of an ARINC 664 network
- Identify the physical options for an ARINC 664 network
- Identify the network topologies for an ARINC 664 network
- Define the Redundant Ports used in an ARINC 664 network
- Explain how the Redundant Ports and Topologies are related
- Define and illustrate the usage of Virtual Links (VLs) and Frames
- Describe the Bandwidth Allocation Gap associated with VLs
- Identify the features and benefits of switch routing using VLs
- Define and explain the flow control associated with an ARINC 664 network
- Identify the layout of an ARINC 664 network Frame
- Identify the fields of an ARINC 664 network Frame header
- Identify the layout of an ARINC 664 network

ABOUT THE INSTRUCTOR
Mr. Troy Troshynski is AIT’s Sr. Vice President for Product Development. He joined AIT in 2002. Mr. Troshynski has worked developing MIL-STD-1553, ARINC 429, and ARINC 664 applications software. He first developed an ARINC 664 Software DataLoader in 2005 that has been used in Airbus and Boeing applications. He has subsequently developed software for ARINC 665 Media Set development and ARINC 664 End System and Switch Testing. Mr. Troshynski holds a Bachelor of Science degree in Physics from Doane College in Crete, Nebraska, and a Bachelor of Science degree in Electrical Engineering from Washington University in St. Louis, Missouri. He is an active participant in the AEEC Software DataLoader Subcommittee.

ORDERING INFORMATION
A664-PT: Two-day Protocol ARINC-664 Training Class
A664-PT-A615A: One-day A651A DataLoader Training Class

Avionics Interface Technologies
3703 N. 200th Street
Omaha, NE 68022
Tel: +1 402.769.9644
Fax: +1 402.763.9645