

NDIA ATC Meeting Commercial Liaison Report

Christer Ljungdahl

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Agenda

- Industry News/Updates
- Industry/Technology Trends

News





Astronics Selected by U.S. Army for Radio Test Set Program

EAST AURORA, N.Y.--(BUSINESS WIRE)-- <u>Astronics Corporation</u> (Nasdaq: ATRO), a leading provider of advanced technologies for global aerospace, defense, and other mission critical industries, announced today that it has been selected by the U.S. Army as the down select winner for the development of its Radio Test Set referred to as TS-4549/T. This program will replace aging GRM-122 radio test equipment for tactical radios in the U.S. Army. It will be an ID/IQ program (Indefinite Delivery/Indefinite Quantity) with anticipated deliverables over multiple years.

Source: Astronics

CHIPS and Science Act of 2022

The CHIPS and Science Act will boost American semiconductor research, development, and production, ensuring U.S. leadership in the technology that forms the foundation of everything from automobiles to household appliances to defense systems. America invented the semiconductor, but today produces about 10 percent of the world's supply—and none of the most advanced chips.

The CHIPS and Science Act provides \$52.7 billion for American semiconductor research, development, manufacturing, and workforce development. This includes \$39 billion in manufacturing incentives, including \$2 billion for the legacy chips used in automobiles and defense systems, \$13.2 billion in R&D and workforce development, and \$500 million to provide for international information communications technology security and semiconductor supply chain activities. It also provides a 25 percent investment tax credit for capital expenses for manufacturing of semiconductors and related equipment.

Spurred by the passage of the CHIPS and Science Act of 2022, this week, companies have announced nearly \$50 billion in additional investments in American semiconductor manufacturing





Source: White House

Securing Supply Chain, Accelerate Research and Innovation, Increase STEM participation

News





Source: **Keysight**

VXG signal generators address 5G, 6G research, satellite communications and radar solutions

Keysight Technologies, Inc. (NYSE: KEYS), a leading technology company that delivers advanced design and validation solutions to help accelerate innovation to connect and secure the world, today launched a new four-channel vector signal generator, with frequency up to 54 GHz that offers up to 5 GHz of radio frequency (RF) bandwidth and low phase noise in a single instrument.

Keysight's new M9484C VXG vector signal generator, expands the company's VXG series portfolio with real-time capabilities to support demanding wireless industry applications.

Rohde & Schwarz extends the R&S ZNB vector network analyzer family maximum frequency to 43.5 GHz

Rohde & Schwarz adds new models and options to the R&S ZNB vector network analyzer family, addressing applications in the mmWave range such as 5G at FR2 frequencies and applications in aerospace and defense in the Ka band. The R&S ZNB26 provides network analysis up to 26.5 GHz, and R&S ZNB43 extends the upper frequency of the midrange VNA family to 43.5 GHz.





Source: Rhode and Schwarz

Increasing device complexity, Increasing BW, More data

News



Source: NI

NI to Acquire NH Research, Enters into Definitive Agreement with Heinzinger

NI (Nasdaq: NATI) today announced the acquisition of NH Research, LLC (NHR), a leader in high power test and measurement applications such as electric vehicles (EV) and batteries. The transaction closed on October 19, 2021. NI is also announcing that it recently entered into a definitive agreement to purchase the EV Systems business of Rosenheim, Germany-based Heinzinger GmbH, a European leader in high-current and high-voltage power systems and this deal is expected to close in Q1 2022.

Astronics Selected for Lilium Jet's Electrical Power Distribution System

Jon Neal, President of Astronics Advanced Electronic Systems, said, "Astronics is thrilled to announce Lilium as a launch customer for our CorePower* high voltage products designed for the More Electric Aircraft and eVTOL platforms. This partnership demonstrates the flexibility of our products and our close collaboration with our customers. Astronics is excited to join Lilium in being a part of the evolution of aviation moving towards cleaner, more sustainable, and accessible modes of transportation."

Source: Astronics



Electrification will be driving new complexities and ATS requirements

Industry/Technology Trends

DoD Digital Engineering Vision

"DoD's vision is to have an engineering enterprise that connects the digital and physical worlds across a system's lifecycle. The end-to-end digital enterprise will incorporate a model-based approach in a digitally connected environment enabled by advanced technologies to conduct full lifecycle activities from concept to disposal."

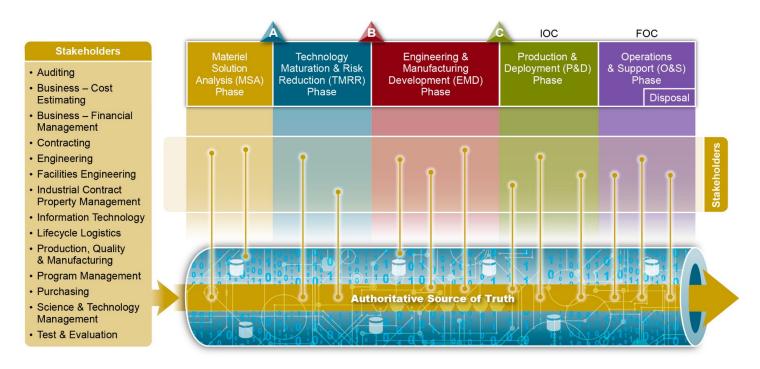
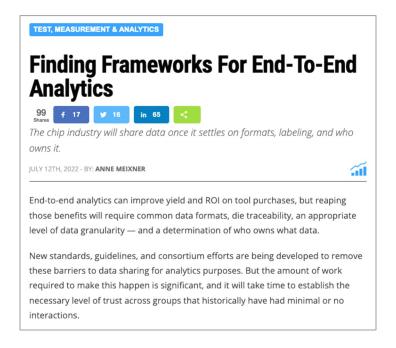


Figure 5: Authoritative Source of Truth

Source: U.S. Depart of Defense, Digital Engineering Strategy, June 2018

Industry/Technology Trends

Industry wide problem

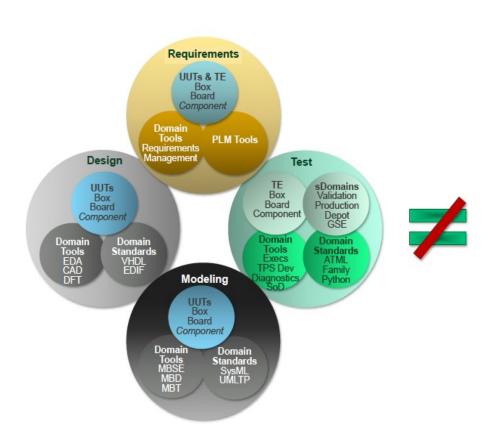


Source: Semiconductor Engineering

"The chip industry will share data once it settles on formats, labeling, and who owns it."

Industry/Technology Trend

Common Workflow Practices used today



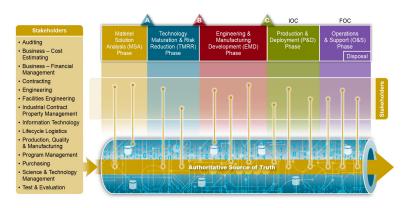
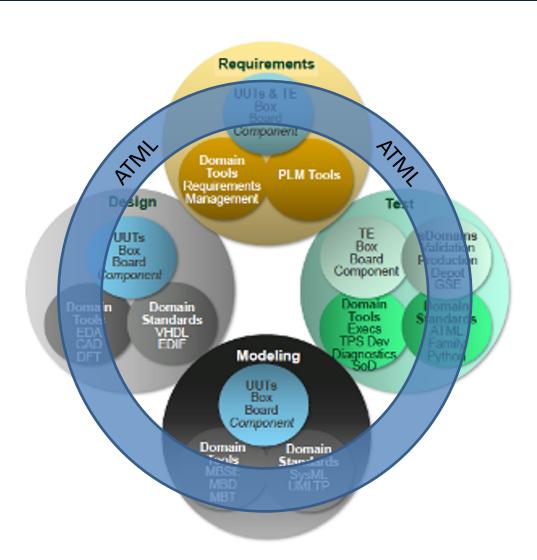


Figure 5: Authoritative Source of Truth

Industry/Technology Trend



We have a start:

- 1. We have an established data format
- 2. We have established data labels
- 3. We have an owning committee