

## Solution Brief

# Audio Test Solution from NI + CIM.AS

As Internet of Things (IoT) devices experience worldwide growth, many electronics products are adopting a voice-command user interface, bringing new acoustic and audio functional test challenges. Test teams must follow the New Product Introduction schedule, meet extended test coverage requirements, and maximize high volume/high mix production test throughput with multiple devices under test (DUT) and revisions. CIM and NI have partnered to create solutions for audio and acoustic test using CIM's CATS technology.

## Application Requirements

- **Flexibility and long-term support** – Provide complete coverage for current and future test requirements.
- **Measurement accuracy** – Ensure confidence in test results with correct fixturing, measurements and analysis.
- **Streamlined Deployment** - Physically and operationally fit into manufacturing processes. Meet development, integration and deployment schedule on time and on budget.

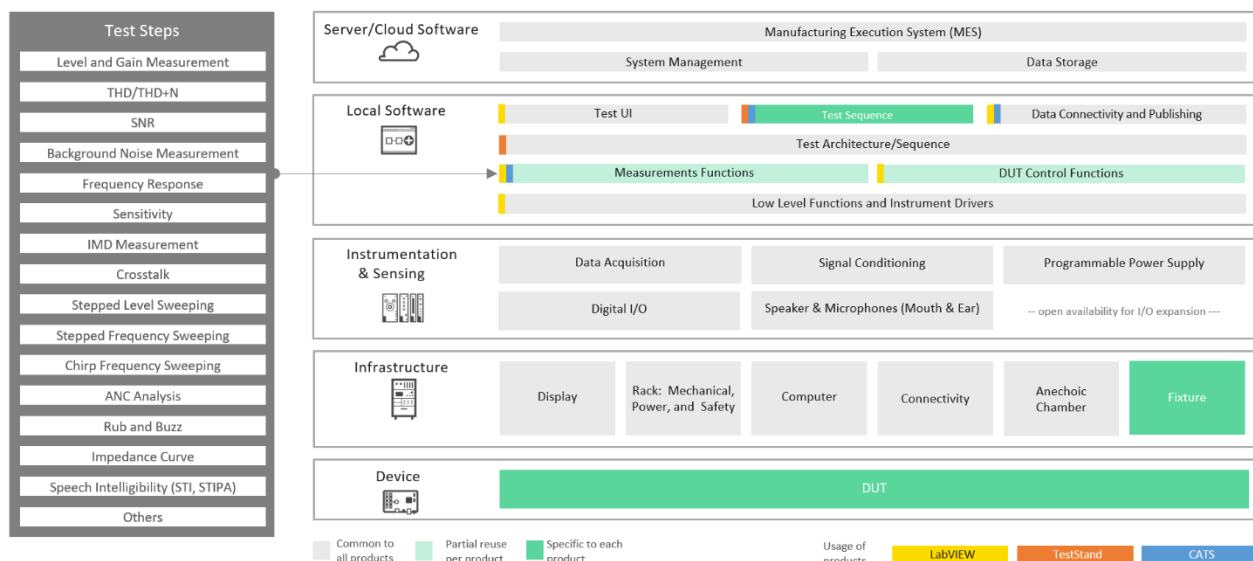
## The CATS Advantage

- Reduce time-to-market with a no-programming solution to complex acoustic measurements
- Ensure measurement quality harnessing decades of specialist experience in electro-acoustic test station design
- Ease development with close integration with industry standard software tools like TestStand and LabVIEW.

## CIM Solution using NI & CATS software

- Electro Acoustic testing functions as build-in TestStand steps
- Electro-Acoustic Test consultancy for Automated R&D Validation and Production Testing
- Integrating Electro-Acoustic Testing into final Production testing flow
- Engaging Test Strategy and Digital Transformation discussion with the customer

## System diagram – Showing reuse possibilities with standardized approach

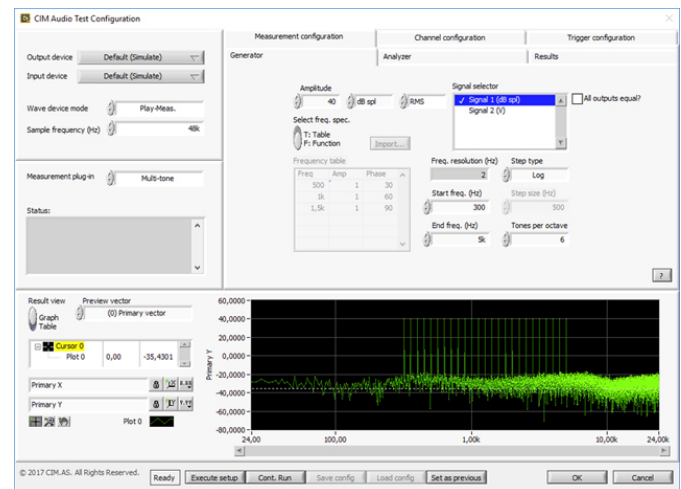


In CIM.AS, our team found a group of engineers who specialized in production and acoustical testing and were willing spend the time to understand the needs of our business, our application, and our test coverage. Together with NI they provided tools and consultation that kept us at the cutting edge of technology and supported our goals.

Csaba Fodor, test Engineer, GN Audio

## CATS: Audio Software test solution for audio validation and production test

- Generation and analysis capabilities
- Analog In and Out support
- Step types integrated into NI TestStand
- No hardware programming needed
- Support for multi hardware platforms
- Automatically performs a wide variety of measurements tailored to various test types
- Includes a complete calibration system
- Offers development of advanced limits
- Ability to view data in real time (Live View)



## Key benefits of CIM Solution

- ✓ 15+ years of Sound and Vibration experience and COTS Electro-Acoustic Testing software for Automated Test environment
- ✓ One-Stop-Shop Test Solution Provider offering T&M software, hardware and IIoT product and services
- ✓ Business level engagement with customer focusing on COT and ROI

## CIM.AS

CIM specializes in computer and electronic engineering for Automated Test & Measurement, Acoustical Testing, IoT, Medical and Vision Systems. CIM is trusted by companies across Europe and known for high quality software development.

**Contact** your NI account manager or CIM.AS to learn more about how NI + CIM solutions and services can help you

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