

Flyer Summary

MSC Nastran + Actran delivers a complete Electro-Vibro-Acoustic (EVA) simulation workflow that enables engineers to predict and optimize Bluetooth audio device performance before physical prototypes are built. By combining structural dynamics, loudspeaker modeling, enclosure acoustics, and sound radiation analysis, manufacturers can reduce development cost, shorten design cycles, eliminate unwanted vibration and resonance, and achieve superior sound quality with greater engineering confidence.

Key Benefits

- Simulate the complete path from **electrical input to sound output**
- Predict **speaker, enclosure, and acoustic performance** early in development
- Reduce physical prototypes and testing costs
- Eliminate unwanted **vibration, buzz, squeak, and rattle (BSR)**
- Optimize sound pressure level (SPL) and frequency response
- Improve product reliability and structural integrity
- Accelerate time-to-market through virtual engineering
- Suitable for **Bluetooth speakers, earbuds, headphones, conference speakers, and portable audio devices.**