NEWS RELEASE

Software-Defined Tuners: A Smarter Way to Build Digital Broadcast Radio

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Digital broadcast radio has reached a turning point. As countries move from analog to digital formats, vehicles today are expected to support multiple digital radio standards — often within the same global platform. What once felt like a simple regional feature choice has become a real architectural challenge for automakers.

What's happening in markets worldwide?

Market and regulatory signals are accelerating this shift. Europe now mandates digital audio broadcasting (DAB+) in all new passenger vehicles, with similar requirements emerging across the Gulf Cooperation Council (GCC). India has adopted Digital Radio Mondiale (DRM) for AM broadcasting and is evaluating digital radio for FM. Indonesia has rolled out DRM across Medium and Short-Wave bands and DAB in Very High Frequency (VHF)-III band. China has adopted its own digital radio standard (CDR) for FM and DRM for AM bands. In the United States, the proposed AM Radio for Every Vehicle Act of 2025 reinforces broadcast radio's role as a public safety service.

The reality is clear: no single hardware platform today can efficiently serve the U.S, European, and rest-of-world markets simultaneously. Supporting all of these using traditional radio designs adds cost, complexity and long-term inflexibility.

The Limits of Chip-Based Digital Radio Design

Most automotive digital radios still rely on dedicated decoder chips, each designed for a specific

standard. This approach works — but it does not scale.

Entering new markets often means new hardware. Post-launch updates are limited. Validation cycles stretch longer. Global platforms become harder to manage. As vehicles move toward software-defined architectures, this hardware-bound approach feels increasingly outdated.

Where Software-Defined Tuners Come in Play

Software-Defined Radio (SDR) shifts signal processing from fixed silicon into software. Applied to broadcast radio reception, this becomes a Software-Defined Tuner (SDT) — one tuner supporting multiple digital radio standards through software configuration.

The advantages are compelling: reduced hardware duplication, easier upgrades, and extended platform lifecycles. But automotive requirements demand more. Reception quality, fast time-to-audio and compatibility with existing infotainment systems are non-negotiable.

Inntot's Engineering Depth, Now Within Visteon

This is where Inntot's work stands out. Acquired by Visteon in 2025, Inntot brings deep experience in building automotive-grade software-defined tuners that deliver reliable performance and superior user experiences in real-world conditions.

Their focus has been solving practical challenges — weak signal performance, fast time-to-audio and seamless integration with legacy radio middleware. The result is a software-defined tuner architecture that matches, and often exceeds, the performance of traditional decoder chips.

Inntot has developed a universal, configurable and high performance SDT solution, supporting all digital radio standards, with key strengths:

- Future proof with easy software upgrade
- Flexible, universal, configurable, scalable, and platform agnostic
- SDT APIs similar to decoder chip interfaces, allowing a seamless integration of legacy digital radio middleware
- Patented technology providing competitive advantages in weak signal performance and time-to-audio challenges

This capability now strengthens Visteon's digital cockpit portfolio, bringing mature software-

defined radio expertise into a broader, software-led platform strategy.

A Natural Fit for the Software-Defined Vehicle

As vehicles transition toward centralized compute and software-upgradable systems, digital radio must evolve with the rest of the cockpit. Software-defined tuners allow radio to be updated, scaled, and adapted through software — not hardware redesign.

For automakers, this means lower long-term cost and simpler global platforms. For consumers, it means better reception, faster access to new services, and radios that improve over time.

Here's what the future of automotive digital radio looks like!

The future of automotive digital radio will be defined by smarter software architectures that absorb complexity instead of multiplying it. With Inntot's software-defined tuner expertise now part of Visteon, the industry isn't just tuning into the future — it's already broadcasting it.

A clear head-turner at CES 2026 was our Remote Tuner Module. Instead of traditional, tightly coupled designs, customers experienced a brand new software-defined remote tuner, powered by Inntot's SDR technology.