

DSR Corporation

For DECT Forum

2026

About DSR

Privately-owned design house for complex software solutions, headquartered in the USA

- 26+ Years in Business
- 5 Offices: US · Portugal · Canada · Japan · Uzbekistan
- 6 wireless stacks developed in-house over 20 years
- Extensive Wireless and Embedded experience (#1 Zigbee stack worldwide)
- 300+ Engineers

- DSR is developing DECT NR+ Software Stack
  - Multi-purpose architecture for Building Automation, Pro-Audio and Industrial IoT use cases
  - Hardware-agnostic – designed to be compatible with any radio SoC
- Extensive experience participating in building robust, interoperable, secure industry standards
  - Part of Building Automation group inside DECT

Members of: csa connectivity standards alliance, dect forum, THREAD GROUP, ETSI, Bluetooth

About DSR Wireless and IoT

DSR

DSR started to work in wireless area in 2001

- 2001 – 2002 **Wi-Fi stack** → Service Project
- 2004 – 2012 **Bluetooth Stack** → DSR product, IP rights sold
- 2012 – 2022 **Custom Stacks** for industrial apps → Service Projects
- 2008 – Present **Zigbee Stack** → DSR product
- 2025 – Present **NR+ Stack** → DSR product

Wireless products by DSR

- Software Stacks
- Gateway Middleware: Bare Metal, Linux, & Android
- Multiprotocol: Multi Pan for Zigbee/Thread
- Bridges: Zigbee/Matter ・BLE/MFI
- Commissioning tools
- Custom Cloud

ZBOSS Open Initiative

Stack

dect nr+

Stack



Gateway/Bridge

zHome Cloud

IoT Framework

Copyright © 2026 DSR Corporation

OneNR+ Highlights

Platform-Agnostic

- Current Platforms: Nordic and Simulator
- Future Platforms: LMS and other chips, when available

Profile and Application Agnostic

Current Profiles

Smart Metering | Smart Cities and Buildings | IPv6

Future Extensions

Audio | Industrial Automation | Other Profiles

Host/Radio Flexible Split

- Monolithic configuration
- Split configuration

IoT and Low-Latency/Streaming Flavors

- **IoT**: Primarily uses RACH (Random Access Channel) transmissions
- **Low-latency/streaming** with primarily scheduled transmissions

Copyright © 2026 DSR Corporation

OneNR+ Current Status

IoT Stack Flavor

- All mandatory features required by the Building Profile:
  - Beaconing
  - RACH / Random Access
  - Association
  - Data transfer
  - MCS-0-4
  - DLC / CVG (including Service Type 2)
  - HARQ
  - Security Mode 1
  - Broadcast / unicast
  - Star networking
- Scalable star topology
- IPv6 Profile supported, including Border Router initial implementation

Matter over NR+
(you will touch it today!)

Low-Latency / Streaming Flavor

- Features
  - High-load, scheduled data transmission
- Scalability
  - Streaming in a star topology
- *Example Configuration*
  - One FT streaming to two PTs
  - 4 sub-slots allocated for transmission to each PT, with 2 sub-slots between transmissions
  - MCS 4
  - Throughput: ~1 Mbps per PT
  - Average latency: ~4 ms

Copyright © 2026 DSR Corporation

OneNR+ Plans

IoT Stack Flavor

- Q4 2026 - IPv6 Star pre-release
- Q1 2027 - Cluster tree release
  (300 devices)
- Q2 2027 – Mesh topology
  (production release)

Low-Latency / Streaming Flavor

- Per use-case and client stack tuning and application development
- Audio applications profile support

Copyright © 2026 DSR Corporation

NR+ Stack from DSR: Unique Business Model

Proven with Zigbee. Expanding across IoT.

Join ZOI community and enjoy the benefits

- Access to source code and development tools
- Non-royalty-based license
- Regular product updates
- Knowledgeable support team and annual support hours
- Participation in a community using the same production technology

ZOI Zone Of IoT

https://dsr-zoi.com

A model designed for long-term technology evolution, not a one-time software transaction.

Copyright © 2026 DSR Corporation

www.dsr-corporation.com • www.dsr-iot.com

DSR

DOING SOFTWARE RIGHT

- Embedded Systems
- Wireless
- Decentralized Systems / Web3
- AI Models, Agents, Workflows
- Computer Vision
- Security Assessment & Hardening
- Enterprise Web
- Mobile
- PRO Audio
- Scalable Databases

Copyright © 2026 DSR Corporation • Proprietary and Confidential