CDR31U
USB DAB Receiver with Data Service Decoder

ESSLINGER
data engineering

CDR31U is a ultra-compact, low-cost, highly reliable DAB receiver card, designed for PC-based DAB multimedia applications. The receiver streams the on-air DAB data via USB to the PC. As a firmware option, data decoders are available that process DAB data services and store the contents to the receiver's memory. This allows to operate the receiver permanently and to have instant access to DAB contents, even if the PC was shut down for longer (e.g. overnight).

Technical Data

Frequency range:
Band III: 174 – 240 MHz
L Band: 1452 – 1492 MHz

DAB services:
Streammode (MPEG audio/video, DxB),
Packetmode, PAD, FIC/FIDC, TII

On-board data decoders (firmware option):
MOT incl. file server, TDC, UDP-IP, TMC

On-board data RAM:
8MB to 32MB

Ratings:
USB: Bus powered
DC (always-on): 5 ... 9V, 160mA

Operating temperature range:
0°C to +65°C   (commercial variant)

Output: USB

Dimensions:
Approx. 85 x 50 x 13 mm

Contact us for full product details or evaluation boards.
CDR31U development was supported by TU Ilmenau.

Features

- Credit card-sized design, powered via USB.
- Very few hardware components due to powerful firmware.
- Supports all DAB services (audio/video, data, FIC) and downloads them to the PC.
- Demodulates the full DAB ensemble.
- Optional onboard data service decoders available to receive, decode and store DAB data services even if the PC is shut down. Separate DC input for PC-independent operation.
- Same board can be used for various DAB data applications.
- Codespace for customer-specific features.
- Failsafe operation by on-board data service monitoring and system self-monitoring.
- Realtime status information, event and error log.
- Powered by Frontier Silicon's 'Chorus'™ CPU.
- API toolkit available to incorporate receiver card into own PC applications.

Applications

- PC-based DAB reception and recording
- Digital Multimedia Broadcasting (DMB, DxB)
- Offline content distribution (electronic newspapers, telelearning)
- Data deployment to closed user groups
- DAB add-on for Car PCs
- Traffic telematics (TPEG, TMC, MOT/HTML)
- Electronic billboards and video screens
- Public transportation:
  - Passenger information in vehicles
  - Multimedia infotainment
  - Announcements, security
- DAB in-house data access, DAB network monitoring

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Leading European DAB data applications are powered by our CDR solutions. Please contact us for references.