

# V.22bis Controller-Based Modem with Fourth Generation SmartDAA® for Embedded Applications

## Product Overview

Conexant's ImagingSmart™ portfolio includes a comprehensive suite of semiconductor solutions for the connected home, office, and information network. Conexant's modem solutions deliver a high level of integration and robust performance. The CX90240 modem device is a simplified design in a small form-factor that allows for quick time-to-market. The CX90240 modem supports worldwide DAA and data modes up to 2400bps.



Conexant's proprietary SmartDAA® 4 LSD builds on three generations of market-leading silicon DAA devices, and reduces BOM costs and necessary board space, making it the most cost efficient silicon DAA in the market. The SmartDAA 4 LSD eliminates the need for costly analog transformers, relays, and opto-isolators typically used in discrete DAA implementation for country-specific modem configurations. The result is a worldwide reduced system cost solution using a single BOM. The SmartDAA4 is system-powered, making it the most reliable and best performing silicon DAA in the market.

This low cost solution integrates MCU, serial host interface, ROM, RAM, and SmartDAA SSD functions onto a single die. The easy-to-use design is pin-to-pin compatible with Conexant's CX93011 product in a 20-pin QFN lead package.

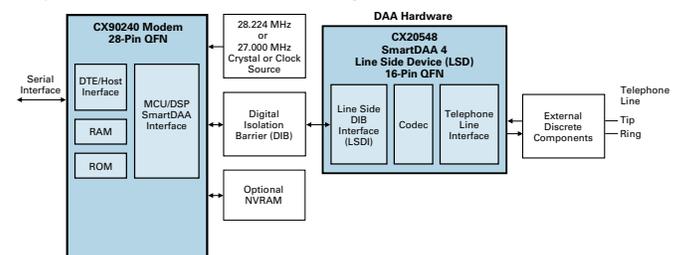
## Applications

- POS terminals
- STBs
- Email terminals
- ATM machines

## Key Features and Benefits

- Pin-compatible to the CX93011 serial modem
- SmartDAA 4 technology
- Worldwide support
- Quick time-to-market
- Low-cost solution
- Small form-factor
- Modulations
  - ITU-T V.22bis (2400bps)
  - V.22 and Bell 212A (1200bps)
  - V.22 fast connect
  - V.21 and Bell 103 (300bps)
  - V.23 1200/75 and 75/1200
  - V.23 half-duplex (1200bps)
- V.42 and MNP2-4 error correction
- Serial interface
- Synchronous/asynchronous data mode—Hardware and software flow control
- Supports the AT command set
- Other protocols
  - V.80 synchronous access mode
  - V.23 reverse mode
- Type I and Type II caller ID decoding
- Worldwide DC mask compliance
- Enhanced DAA features
  - Digital line protection
  - Line-in-use detection
  - Extension pickup detection
  - Remote hang-up detection
- Single 3.3V supply
- 20-pin QFN

## System Block Diagram



## Ordering Information

| Ordering Part Number | Part Number | Description   | Package         |
|----------------------|-------------|---------------|-----------------|
| DS22-CSM-11Z         | CX90240-11Z | V.22bis Modem | 20-pin QFN Lead |
|                      | CX20548-11Z | SmartDAA 4    | 16-pin QFN Lead |

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