

V.22bis Modem with 3rd Generation SmartDAA

CX84100

2400 bps Modem with SmartDAA® 3 for Embedded Applications

Conexant's broadband communications portfolio includes a comprehensive suite of semiconductor solutions that enable the digital home and information network. Conexant modem solutions deliver a high level of integration and robust performance. The CX84100 modem device is a simplified design in a small form-factor, that allows for quick time-to-market. The CX84100 V.22bis modem supports worldwide DAA and data modes up to 2400bps.

Conexant's proprietary SmartDAA® 3 line side device 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 bill of materials (BOM). The SmartDAA 3 is system-powered, meaning the DAA operates reliably without drawing power from the line. The advantage of system-powered DAA over line-powered DAA is the enhanced performance when line current is insufficient.

This low cost solution integrates microcontroller (MCU), serial host interface, ROM, RAM and SmartDAA system side device (SSD) functions onto a single die. The easy-to-use design is pin-to-pin compatible with the following high-speed solutions: Conexant SCXV.92/SCXV.43/SCXV.32bis (CX86500-2X)in a 28-pin TSSOP package.

Applications

The Conexant's CX84100 V.22bis modem is ideal for embedded applications such as:

- POS Terminals
- Set-top Boxes
- Email Terminals
- ATM Machines



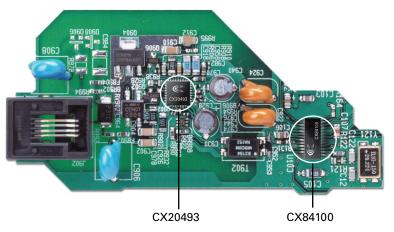
CX84100 Modem Features

- Modulations
 - ITU-T V.22bis (2400 bps)
 - V.22 and Bell 212A (1200 bps)
 - V.22 fast connect
 - V.21 and Bell 103 (300 bps)
 - V.23 1200/75 and 75/1200
 - V.23 Half Duplex (1200 bps)
- V.42 and MNP2-4 Error Correction
- Serial Interface
- Synchronous/Asynchronous Data Mode
 - Hardware and software flow control
- Supports 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 Hangup Detection
- Single +3.3V supply
- 28-pinTSSOP
- SmartDAA 3 28-pin QFN

Part Number CX84100

Description V.22bis Modem with 3rd Generation SmartDAA

CX84100 Modem Block Diagram



Actual Modem Area 64mm x 30mm

Advantages

- Pin-compatible to SCXV.92/SCXV.43/ SCXV.32bis (CX86500-2X) in a 28-pin TSSOP package
- SmartDAA 3 technology
- Worldwide support
- Quick time-to-market
- Low-cost solution
- Small form-factor

Ordering Information

Marketing Name	Modem	SmartDAA®	Ordering Number
V.22bis Modem	CX84100-xx	CX20493-21	DS22-L100-1xx
Evaluation Board			RD01-D680-0xx
Data Sheet and Design Guide			Doc # 101979
AT Command Manual			Doc # 102000

Conexant Product Portfolio

The company's broad portfolio of semiconductor products also includes client-side DSL, cable, and dial-up modem solutions; fiber optic system-on-chips; broadcast video encoders and decoders; digital set-top box components and systems solutions; and IEEE 802.11a/b/g/n-compliant WLAN chipsets. Additional products include a complete line of asymmetric and symmetric DSL central office solutions, which are used by service providers worldwide to deliver broadband data, voice, and video over copper telephone lines.

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