



CSM92/34/32 Serial Modem with 4th Generation SmartDAA

CX93011

Conexant's portfolio includes a comprehensive suite of semiconductor solutions for communications and consumer applications.

Controller-Based Modem with SmartDAA[®] 4 for Embedded Applications

Conexant's portfolio includes a comprehensive suite of semiconductor solutions for broadband communications and the digital home. The CX93011 modem paired with the CX20548 SmartDAA[®] 4 Line Side Device (LSD), is ideal for embedded applications such as Point of Sale (POS) terminals, Set-Top Boxes (STB), Video Recorders, Meters, Security Systems, Remote Site Management and other applications that require robust dial-up connectivity.

The CX93011 serial modem device set consists of a CX93011 serial interface modem in a 6x6mm 20-pin Quad Flat-No Lead (QFN) package and CX20548 SmartDAA 4 LSD in a 4mmx4mm 16-pin QFN package.

The device set integrates the microcontroller, digital signal processor, memory, and a worldwide DAA/telephone line interface function that operates with public switched telephone network (PSTN) telephone lines worldwide.

The V.92 modem supports data modes up to 56 kbps and includes features such as Quick Connect, Modem-on-Hold, and PCM Upstream. A V.34 option and V.32bis option are also available.

Conexant's SmartDAA 4 line side device builds on three generations of market leading silicon DAA devices. It reduces Bill of Material (BOM) cost and necessary board space, making it the most cost efficient silicon DAA in the market. It 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. The SmartDAA 4 is system-powered, making it the most reliable and best performing silicon DAA in the market.

The CX93011 device set is pin-compatible with the CX90240 device set. USB (CX93010) and serial/USB speakerphone (CX93021) versions of the CX93011 family chipsets are available as well.

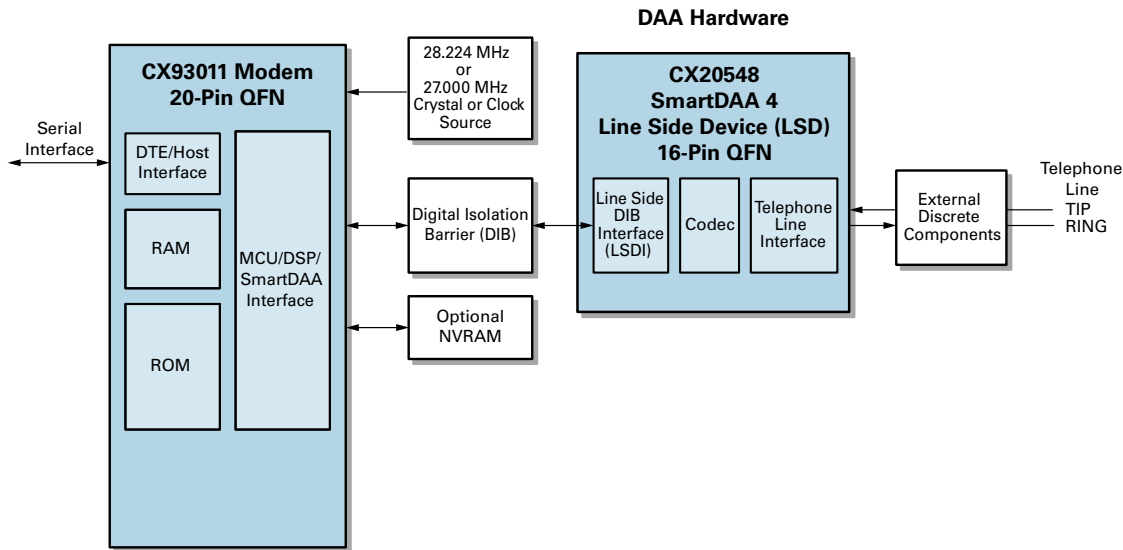


Distinguishing Features

- Controller-based modem, no external memory required
- V.92, V.34 and V.32bis options—V.92 includes Quick Connect, Modem-on-Hold and PCM Upstream
- V.17/V.29 Fax Class 1/1.0 and Fax Class 2
- V.29 FastPOS and V.22 Fast Connect
- SIA Protocol and Contact ID
- V.80 sync access mode, synchronous and asynchronous DTE interface
- V.44/V.42bis and MNP5 data compression
- V.42 and MNP2-4 error correction
- Supports 28.224 MHz or 27 MHz operation
- Serial interface (USB and USB/serial versions available)
- Optional NVRAM support
- Pin compatible with CX90240 chipset
- CX20548 SmartDAA 4 LSD in a 16-pin QFN
- Worldwide support
- Quick time-to-market reference design
- Reference design supports 6KV isolation

Part Number CX93011

Description CSM92/34/32 Serial Modem with 4th Generation SmartDAA



CX93011 CSMxx Modem Simplified Interface

CX93011 Features

- Modulations and protocols
 - ITU-T V.92: Quick Connect, Modem-on-Hold and PCM upstream
 - V.90/V.34/V.32bis/V.32
 - V.22bis/V.22/V.23/V.21
 - V.23 reverse, V.23 half-duplex
 - Bell 212A/Bell 103
 - V.29 FastPOS and V22 Fast Connect
 - SIA Protocol and Contact ID for alarm equipment
 - V.80 Synchronous Access Mode
 - V.17/V.29 Fax Class 1/1.0 and Fax Class 2
- V.44/V.42bis/MNP5 data compression
- V.42/MNP2-4 Error correction
- Call waiting (CW) detection for selected countries
- Asynchronous Serial DTE interface
- Hardware and software flow control and speed buffering
- Embedded and upgradable 63 country profiles
- Optional serial NVRAM interface for country profile storage and code upgrades
- Full-duplex 8-bit/16-bit PCM voice pass-through mode
- 28.224 MHz or 27.000 MHz frequency XTAL or clock input

- Worldwide operation
 - Complies to TBR21 and other country requirements
 - Type I and Type II Caller ID (CID) decoding
 - Type II Caller ID snooping
 - Call progress, blacklisting
 - Meets worldwide DC mask requirements
- Low power and voltage
 - Single +3.3 V supply
 - Low power consumption mode
 - +3.3 V I/O level
- Compact, robust board design
 - Reference design files provided for quick time-to-market
 - Reference design tested for PTT and TBR.21 approvals
 - Small, low-profile modem packages
 - Reference design supports 6KV isolation

SmartDAA Features

- Extension pick-up detection
- Digital line protection
- Line reversal detection
- Remote hang-up detection
- Worldwide compliance
- CX20548 SmartDAA 4 LSD in a 16-pin QFN
- Worldwide support with a single design

Conexant Product Portfolio

Conexant's comprehensive product portfolio includes solutions for imaging, audio, and video applications, and analog modems that enable cost-effective Internet access. The company's broadband access products include end-to-end solutions for xDSL networks, and PON solutions for fiber optic applications.

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