NEW PRODUCT BRIEF

73M2901

TDK Semiconductor's ADVANCED SINGLE-CHIP MODEM

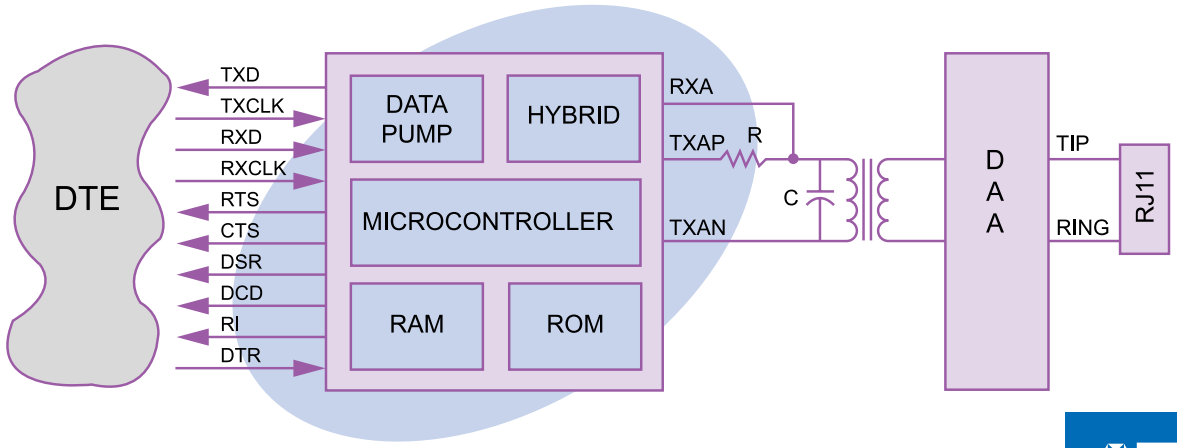
Description

The 73M2901 is a single-chip modem that combines all the controller and data pump functions necessary to implement an intelligent V.22bis data modem. This device is based on TDK Semiconductor's implementation of the industry standard 8032 microcontroller core with a proprietary multiply and accumulate (MAC) coprocessor. ROM and RAM necessary to operate the modem are contained on the device. DAA support is provided. Additionally, the 73M2901 provides an on-chip oscillator.

The 73M2901 is a high performance, low voltage, low power, single chip modem capable of data transmission and reception through 2400bps. The 73M2901 is intended for embedded applications (such as: set-top-box, p.o.s., vending machine, metering, credit card readers) and battery operation. This device offers options for modem design ranging from a 3.3 volt low power design to a conventional 5 volt design with optional internal hybrid and country specific call progress support.

Features

- Low overall system chip count. True one chip solution for embedded systems
- Low operating power (~100mW, automatic standby and power down options available)
- Internal ROM and RAM for normal operation
- On chip Sigma Delta A/D D/A converter
- On chip DAA support
- Designed for either +3.3 volts or +5 volts
- Data speeds:
  - V.22bis – 2400bps
  - V.22, Bell 212 – 1200bps
  - V.21, Bell 103 – 300bps
  - V.23 – 1200/75bps (w/ turnaround/PAVI)
  - Bell 202 – 1200
- "AT" command set
- Host access to modem RAM via AT commands allows parameter modification
- Host access to modem port pins via AT commands for custom I/O expansion
- CTR 21 DAA Compliance
- Multi-Country Call Progress Support
- DTMF tone generation and detection
- Precise and imprecise call progress support
- Packaging: 32 pin PLCC or 44 pin TQFP



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