Intel® MD566X for ISA, Serial, and PCMCIA

MODEM SILICON OPERATIONS

Overview

The Intel® MD566X is an enhancement of the MD565X chipset. Due to advancements in architecture the DSP no longer requires 64K of external SRAM. This new technology improves performance while decreasing board size, power consumption, and cost.

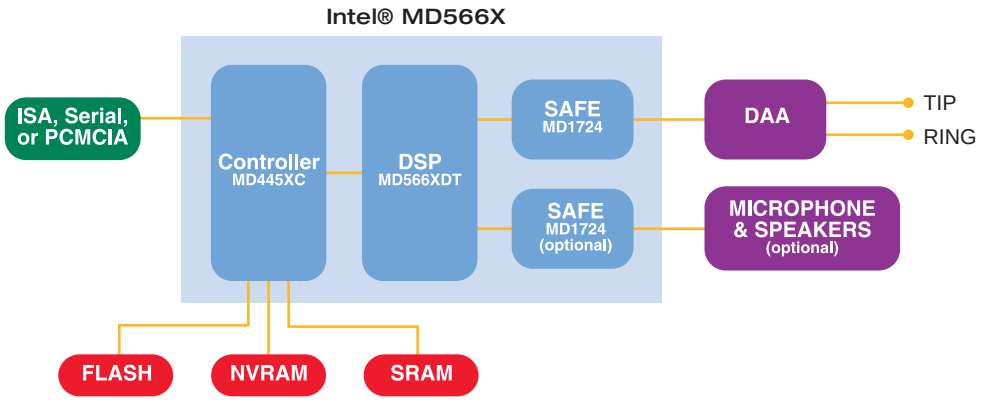
The MD566X owes its capabilities to the sophisticated architecture of its controller and DSP. Each component's highly integrated design minimizes part count and board area.

This high performance V.90 solution delivers robust data, fax, and voice features—including full-duplex speakerphone. The single-platform design means that no additional circuitry is needed to support ISA, Serial, or PCMCIA interfaces and a host of features.

The MD566X meets PC-based communications requirements for internal, external, and PCMCIA applications. It meets Microsoft* PC 98 specifications for Windows* and legacy applications. It also supports AT commands for data, Voice IS-101, and Fax Class 1.

The MD566X serves multiple levels of product, from basic feature sets to full-featured speakerphone applications. With its powerful controller and DSP the MD566X offers excellent performance for today's most demanding applications.

System Block Diagram



Features: MD566X

- Data modulation
  - Data rates up to 56 kbps†
  - ITU-V.90 56K compliant
  - ITU-T V.34 (33,600 to 2,400 bps)
  - ITU-T V.32 bis, V.23, V.22 bis, V.21
  - Bell* 212A and 103
  - Error correction: ITU-V.42 and MNP* 2–4
  - Data compression: ITU-V.42 bis and MNP 5
- Fax modulation
  - ITU-T V.17, V.29 to 14,400 bps
  - Fax Class 1 commands
- Interface
  - ISA bus direct or plug and play
  - Serial RS-232/V.24 interface
  - PCMCIA interface
- PC telephony
  - International telephony support
  - Voice compression: ADPCM, linear, and CL1
  - 4800, 7200, 8000, 9600, and 11025 samples/sec.
  - Telephone emulation for headset applications
  - Voice IS-101 commands
  - Full-duplex, echo-cancelled digital speakerphone
- Power requirements
  - Single +5-V power source; 3.3-V DSP
  - Automatic sleep and wake-up modes
- Microsoft* PC 98 compliant
- Microsoft, Windows* TAPI-compliant
- AT command-driven
- Supports Windows 95, 98, NT4.0 and 2000*

†maximum speed allowed by the FCC is 53.333 kbps.

Product	Package
MD445XC Controller	128-pin MQFP or LQFP
MD566XDT Digital Signal Processor (DSP)	128-pin MQFP or LQFP
MD1724 Sigma Delta Analog Front End (SAFE)	44-pin LQFP

Intel Access

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