



Lucent Technologies L56xVCS/L33xVCS High-Integration Controller-Based Modem Chip Set

Features

- Data mode capabilities:
 - ITU V.90 rates: 56000 bits/s—28000 bits/s
 - K56flex rates: 56000 bits/s—32000 bits/s
 - — ITU-T V.34 rates:
 - 33600 bits/s—2400 bits/s
 - V.32terbo, V.32bis, and fallbacks
 - TIA/EIA 602 standard for AT command set
 - V.42 error correction (LAPM and MNP*)
 - V.42bis and MNP Class 5 data compression
- FAX mode capabilities:
 - ITU-T V.17, V.29, V.27ter, and V.21 Ch 2
 - TIA/EIA 578 Class 1 and Class 2 FAX
- *SIMULTALK™* Full-Duplex Speakerphone (FDSP) capabilities:
 - Adaptive acoustic echo canceller for dynamic speaker/microphone positioning
 - Concurrent DTMF tone detections
- High integration
 - Integrated DSP167X and interface device
 - ISA interface
 - Call progress speaker driver
- Integrated PCMCIA interface capabilities:
 - Full PC-card compliant
 - 16-bit multifunction card support for external logical devices
 - Independent power management per logical device
- Integrated ISA interface capabilities:
 - Full PnP 1.0A Plug and Play compliant
 - *Microsoft†* PC 97 & PC 98 logo compliant with 16-bit PC address decode
 - with eight selectable PC IRQs
 - with six selectable PC DMA channels (three 8-bit, three 16-bit)
- Integrated serial V.24 interface capabilities:
 - Autobaud up to 230K baud
 - Full RS232C asynchronous protocol support
- USB supports
- Full compliance with Universal Serial Bus Specification Revision 1.0 including power management
- Targeted for *Windows†* 98 & NT 5.0
- PCI supports
- Meet *Microsoft* PC 98 requirement
 - ACPI power management
- High-Precision Sigma-Delta Codec CSP1034
 - Integrated hybrid
- 3 V and 5 V devices available
- Extensive bit I/O control for homologation control
- Enhanced voice features:
 - IS-101 AT+V commands with extensions
 - Telephone answering machine (TAM)
 - Record/playback
 - Business audio (BA)
 - Call screening
 - Ring detect
 - Variable speed playback (VSP)
 - Data/FAX/Voice call discrimination
- Caller identification (caller ID)
- Internal PLL for low-speed crystal support
- Cell
 - Cellular enhancement—*ETC‡*
- Flash-programming support
- Enhanced power management
- 3 V and 5 V chip sets
- Single package (plastic) option: 128 TQFP, 144 TQFP, or 160 MQFP

* MNP is a trademark of Microcom, Inc.

† *Microsoft* and *Windows* are registered trademarks of Microsoft Corporation.

‡ *ETC* is a registered trademark of Paradyne Corporation.

Description

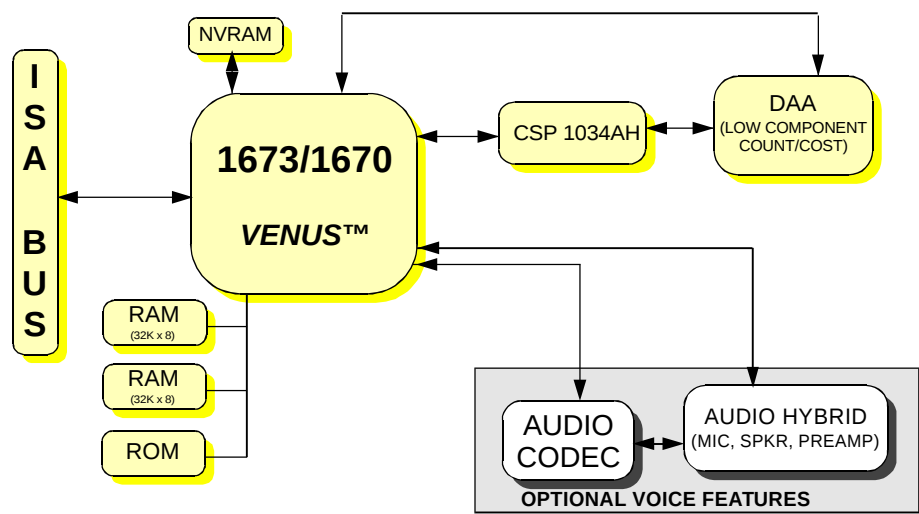


Figure 1. ISA Bus/Motherboard Block Diagram

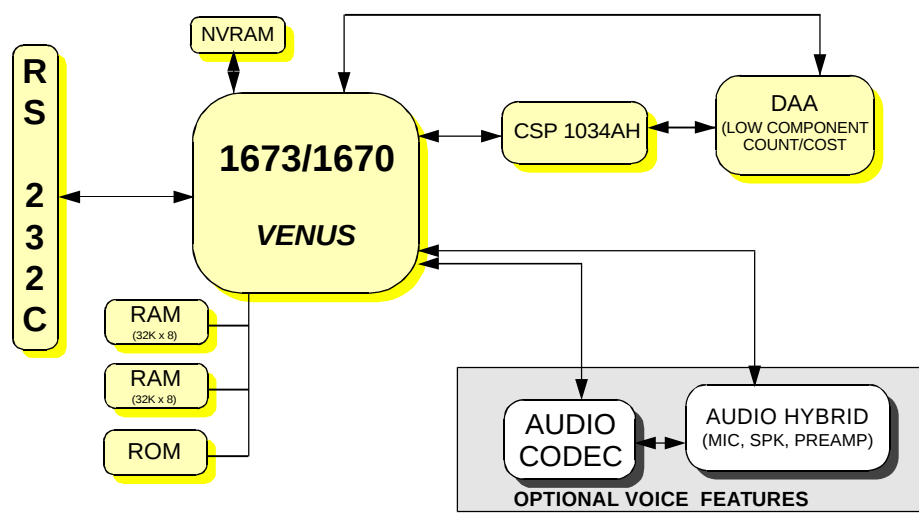


Figure 2. Serial Box Modem Block Diagram

Description (continued)

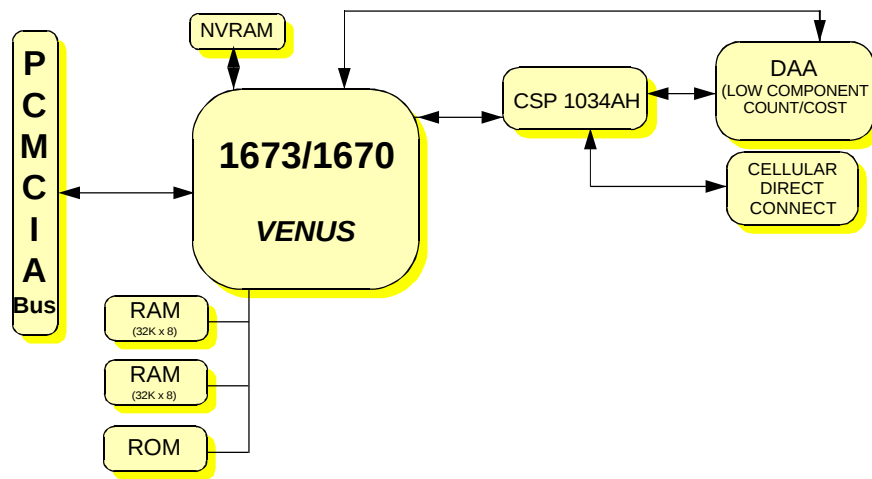


Figure 3. PC-Card Block Diagram

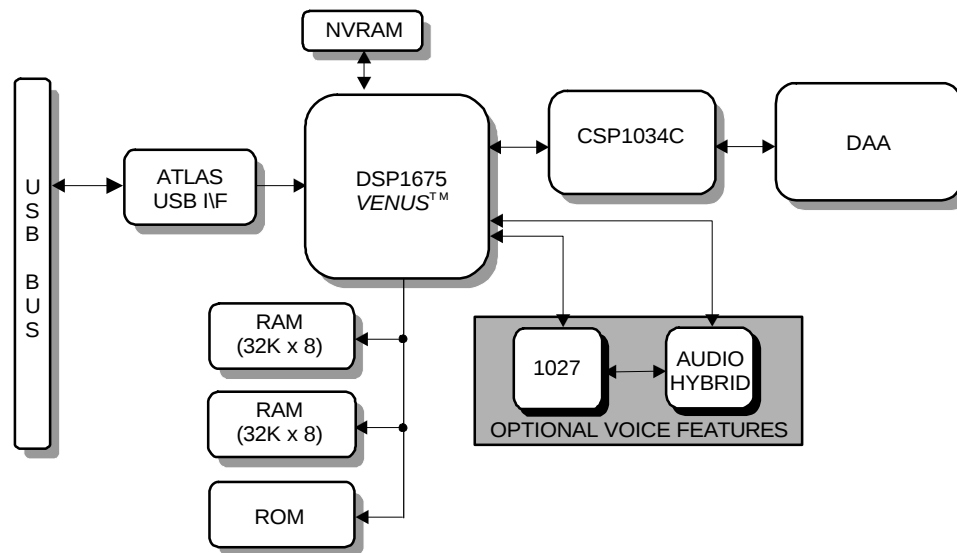


Figure 4. Venus USB Block Diagram

Description (continued)

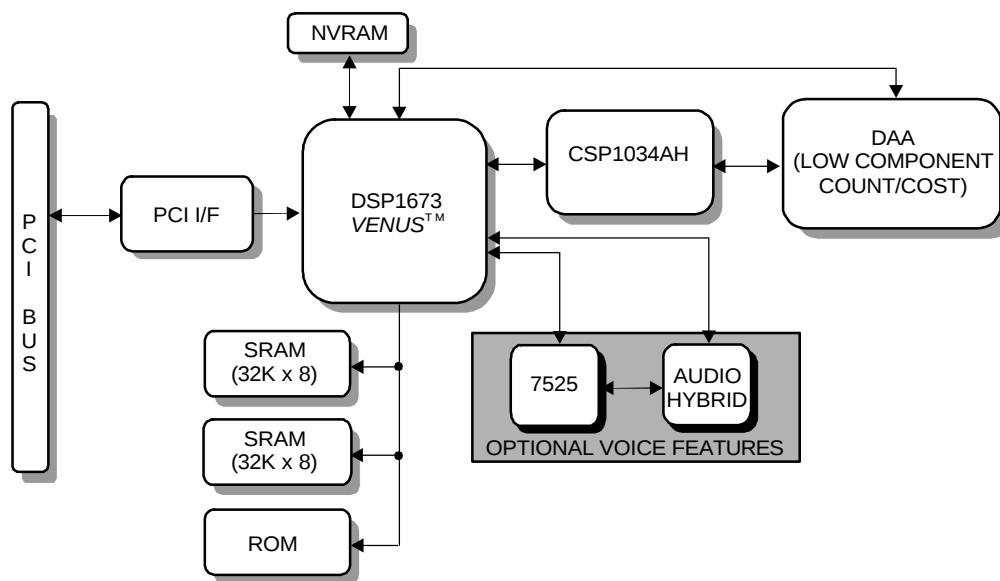


Figure 5. Venus PCI Block Diagram

Operating Systems Supported

- Windows 3.1
- Windows 3.11
- Windows 95
- Windows NT
- Complete DOS Support
- OS/2* - WARP
- Macintosh[†]
- UNIX[‡]

* OS/2 is a registered trademark of International Business Machines Corporation.

† Macintosh is a registered trademark of Apple Computer, Inc.

‡ UNIX is a registered trademark licensed exclusively through X/Open Company Ltd.

Ordering Information

Table 1. Chip Set Names and Part Numbers

Platform	Chip Set Name	Part Number	Package
Desktop ISA/Serial	L56DVCS Data/FAX/Voice/Cell	DSP1673 CSP1034AH T7525	160 MQFP/128 TQFP 44 MQFP 28 SOJ
PC Card	L56PVC Data/FAX/Cell	DSP1673 CSP1034AH T7525	144 TQFP 48 TQFP 28 SSOP
Desktop ISA/Serial	L33DVCS Data/FAX/Voice/Cell	DSP1670 CSP1034AH T7525	160 MQFP/128 TQFP 44 MQFP 28 SOJ
PC Card	L33PVC Data/FAX/Cell	DSP1670 CSP1034AH	144 TQFP 48 TQFP
USB	L56DVU + 3 Data/FAX	DSP 1675 CSP 1034C USB INT	128 TQFP 44 MQFP 48 TQFP
PCI	L56DV + P Data/FAX	DSP 1673 CSP 1034AH PCI INT	128 TQFP 44 MQFP 128 TQFP

Package Information

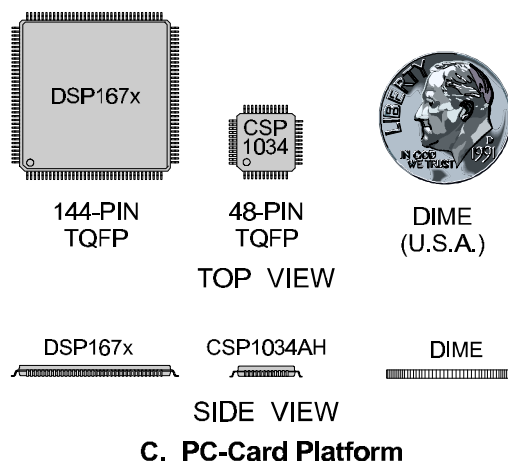
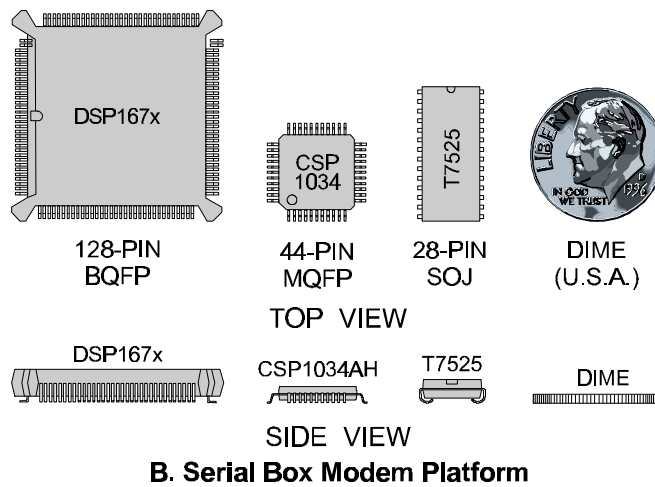
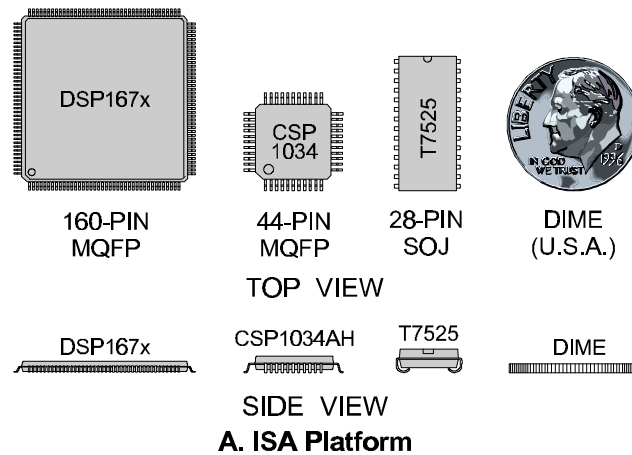
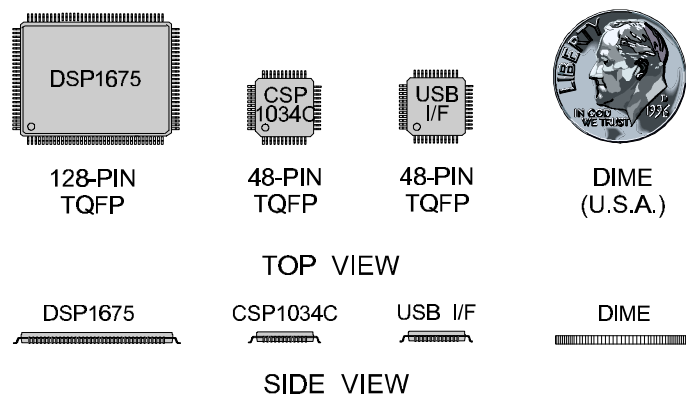
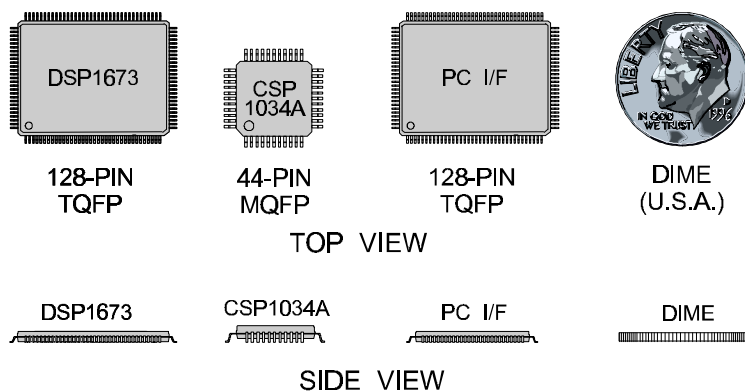


Figure 6. Package Options

Package Information (continued)



A. USB Modem Block Diagram



B. Controller-Based PC Block Diagram

Figure 7. Additional Package Options

For additional information, contact your Microelectronics Group Account Manager or the following:

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Printed in U.S.A.

August 1998
PN98-181DMOD (Replaces PN96-024 DMOD)



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