

## TSC 73K324BL ITU V.22bis/V.23/V.22/V.21/Bell 212A Single-Chip Modem w/Integrated Hybrid

# **Target Specification**

October 1996

#### DESCRIPTION

The TSC 73K324BL is a highly integrated single-chip modem IC which provides the functions needed to construct a V.22bis compatible modem, capable of 2400 bit/s full-duplex operation over dial-up lines. The TSC 73K324BL is an enhancement of the TSC 73K324L single-chip modem which adds the hybrid hook switch control, and driver to the TSC 73K324L. The TSC 73K324BL integrates analog, digital, and switched-capacitor array functions on a single substrate, offering excellent performance and a high level of functional integration in a 32-Lead PLCC package.

The TSC 73K324BL operates from a single +5 V supply for low power consumption.

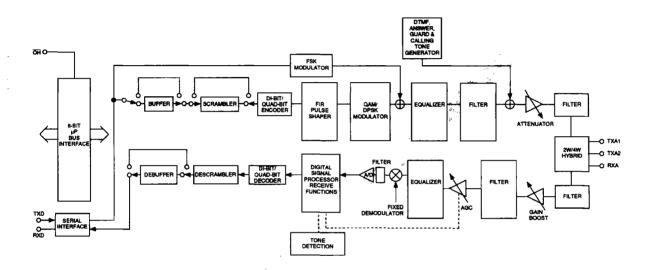
The TSC 73K324BL is designed to appear to the systems designer as a microprocessor peripheral, and will easily interface with popular single-chip microprocessors (80C51 typical) for control of modern functions through its 8-bit multiplexed address/data bus or via an optional serial control bus.

#### **FEATURES**

- Includes features of TSC 73K324L single-chip modem
- On chip 2-wire/4-wire hybrid driver and off hook relay buffer
- One-chip multi-mode V.22bis/V.23/V.22/V.21 and Bell 212A compatible modem data pump
- FSK (300, 1200 bit/s), DPSK (600, 1200 bit/s), or QAM (2400 bit/s) arcoding
- V.23 4 wire operation @ 1200 bit/s
- Pin and software compatible with TSC 73K222BL and TSC 73K224BL
- Interfaces directly with standard microprocessors (8048, 80C51 typical)
- Parallel or serial microprocessor bus for control
- Selectable asynch/synch with internal buffer/debuffer and scrambler/descrambler functions
- All asynchronous and synchronous operating modes (internal, external, slave)
- CMOS technology for low power consumption (typically 100 mW @ 5 V) with power-down mode (15 mW @ 5 V)

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#### **BLOCK DIAGRAM**



Target Specification: The target specification is intended as an initial disclosure of specification goals for the product. Product is currently in the design phase of development. TDK Semiconductor Coporation assumes no obligation regarding future manufacture unless agreed to in writing.

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