National Semiconductor

ADVANCE INFORMATION

TP34XX MICROWIRE™ Interface Device (MID)

General Description

The MICROWIRETM Interface Device MID gives a general microprocessor (such as National 32000 series processors, Intel 80C188, 80C86 or 80286, Motorola 6800 and 68000 family of processors) the ability to communicate efficiently with Microwire based NSC peripherals for ISDN (e.g., TP3420, TP3410) and Non-ISDN (e.g., EEPROMs, LED drivers) applications.

Applications

- ISDN Terminal Adapters
- Digital Line cards (ISDN and Non ISDN)
- Analog Linecards using National COMBO IITM
- Interfacing to industry standard serial EEPROMs
- Interfacing to industry standard Microwire peripheral devices such as Analog to Digital Converters, LCD drivers, clock generators

Features

- Multiplexed and Non-multiplexed microprocessor bus compatible
- National/Intel and Motorola microprocessor bus compatible
- CK in up to 20 MHz
- Microwire clock speeds up to 5 MHz
- Directly compatible with 8- and 16-bit Microwire peripherals
- 4 chip select lines (24-pin) or 8 chip select lines (28-pin)
- Memory mapped peripherals
- Programmable Microwire Clock to communicate with devices of different speeds
- Operates as Microwire bus master or slave
- 24-pin Skinny-DIP pkg or 28-pin PLCC
- CMOS, Low Power

Block Diagram

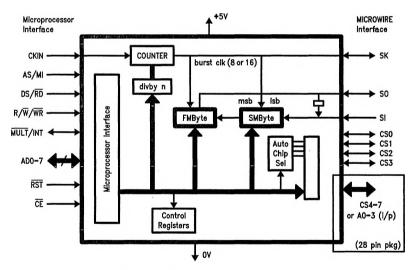


FIGURE 1. MICROWIRE Interface Device MID

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