VLSI TECHNOLOGY, INC.

VL82C284

CMOS CLOCK GENERATOR AND INTERFACE

FEATURES

- Generates clock for Intel 286-type microprocessor-based systems
- External TTL source or crystal may be used as frequency source
  - On-board crystal oscillator
- Provides Local –READY signal for system synchronization
- Generates system reset
- Schmitt-trigger reset input assures stability and noise immunity
- Low power consuming CMOS technology

DESCRIPTION

The VL82C284 is a clock generator and driver that provides clock and interface signals to Intel 286-type microprocessor-based systems. All device output signals are synchronized to the output clock signal.

The clock input and output frequencies are twice the frequency used internally by the microprocessor in the system. To avoid confusion, the clock frequency in the order information represents the internal system microprocessor clock frequency (e.g., the devices listed as 8 MHz would actually have an input
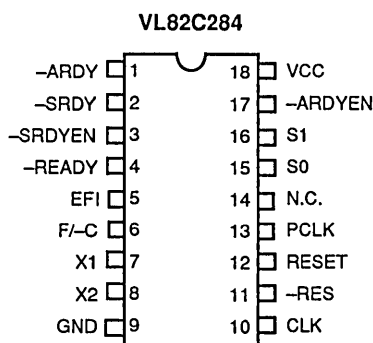
crystal or a TTL signal frequency of 16 MHz).

The VL82C284 also supplies the system with a high-noise-immunity reset, as well as a synchronous peripheral clock and a synchronous –READY to indicate the completion of the current bus cycle.
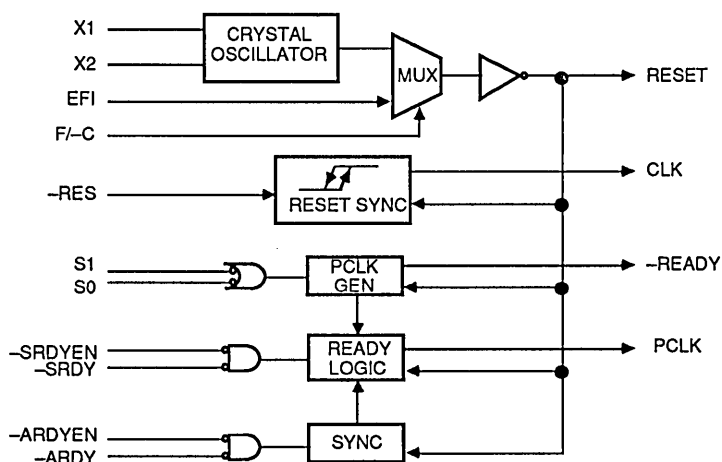
The peripheral clock is controlled by two status input signals, which may be left open if not used.

The VL82C284 is available in an 18-pin ceramic and plastic DIP, as well as in a plastic leaded chip carrier.

PIN DIAGRAM

VL82C284

–ARDY	1	18	VCC
–SRDY	2	17	–ARDYEN
–SRDYEN	3	16	S1
–READY	4	15	S0
EFI	5	14	N.C.
F/–C	6	13	PCLK
X1	7	12	RESET
X2	8	11	–RES
GND	9	10	CLK

BLOCK DIAGRAM

PLEASE CONSULT DATA SHEET FOR DETAILED INFORMATION

ORDER INFORMATION

Part Number	Clock Frequency	Package
VL82C284-08PC		Plastic DIP
VL82C284-08QC	8 MHz	Plastic Leaded Chip Carrier (PLCC)
VL82C284-08CC		Ceramic DIP
VL82C284-10PC		Plastic DIP
VL82C284-10QC	10 MHz	Plastic Leaded Chip Carrier (PLCC)
VL82C284-10CC		Ceramic DIP

Note: Operating temperature range is 0°C to +70°C.