



VL82C84A PRODUCT BRIEF

CLOCK GENERATOR AND DRIVER

FEATURES

- Two maximum clock frequencies available:
 - 8 MHz (VL82C84A-08)
 - 10 MHz (VL82C84A-10)
- Local READY is provided, as well as Multibus[®] READY synchronization
- Schmitt-trigger input generates system RESET output
- Clock generator supports the 8086, 8088, and other similar processors
- Capable of clock synchronization with other VL82C84A devices
- Crystal or TTL input may be used as a frequency source
- 100 mW maximum power dissipation

DESCRIPTION

The VL82C84A is a single-chip clock generator/driver for the 8086, 8088, and similar processors. The device contains a crystal-controlled oscillator and a divide-by-three counter, as well as complete synchronization and reset logic. Handling all of these functions on a single device allows the VL82C84A to significantly reduce the chip count in a system, while enhancing reliability, production ease, and increasing mean time between failure (MTBF).

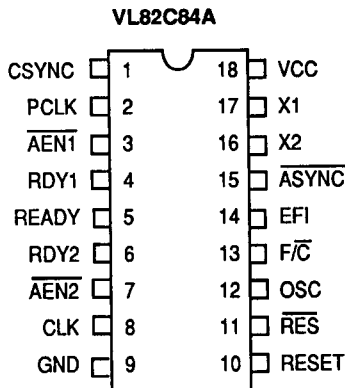
Fabricated in low-power CMOS, the VL82C84A provides a convenient way to decrease power consumption of the system. Fully compatible with existing

designs using the NMOS 8284A, the VL82C84A provides a low-power cost-effective solution.

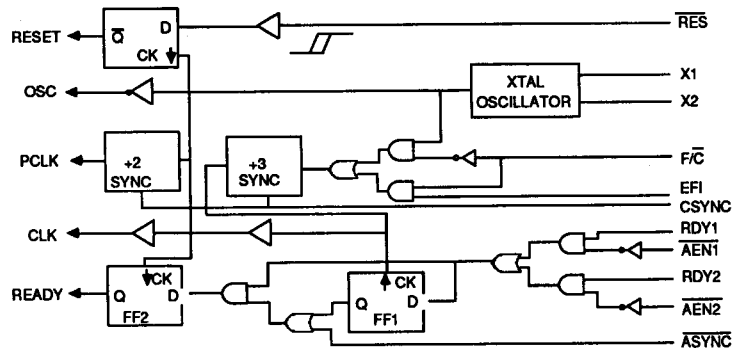
The output drivers of the VL82C84A offer the driving capability of the conventional HMOS device. As a result, they do not require any external drivers.

The VL82C84A is compatible with all the other members of the VL82CXX family of microprocessor peripherals. Offering higher performance and lower power consumption than previously available 82CXX peripherals, these devices offer CMOS advantages to 8086, 8088, and similar systems.

PIN DIAGRAM



BLOCK DIAGRAM



ORDER INFORMATION

| Part Number | Clock Frequency | Package |
|---------------|-----------------|-----------------------------|
| VL82C84A-08PC | 8 MHz | Plastic DIP |
| VL82C84A-08QC | | Plastic Leaded Chip Carrier |
| VL82C84A-08CC | | Ceramic DIP |
| VL82C84A-10PC | 10 MHz | Plastic DIP |
| VL82C84A-10QC | | Plastic Leaded Chip Carrier |
| VL82C84A-10CC | | Ceramic DIP |

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