

82420 PCIset-Compatible Level II Cache Module Family

Features

- Cache size 128 Kbytes or 256 Kbytes
- Tag width of 7 bits plus valid bit
- Independent dirty bit
- Operates with systems based on the Intel 82420 core logic
- Zero-wait state operation at 33 MHz
- Constructed using standard asynchronous SRAMs
- 112-pin Burndy Connector, Part Number CELP2X56SC3Z48
- Single 5V ($\pm 5\%$) power supply
- TTL-compatible inputs/outputs

Functional Description

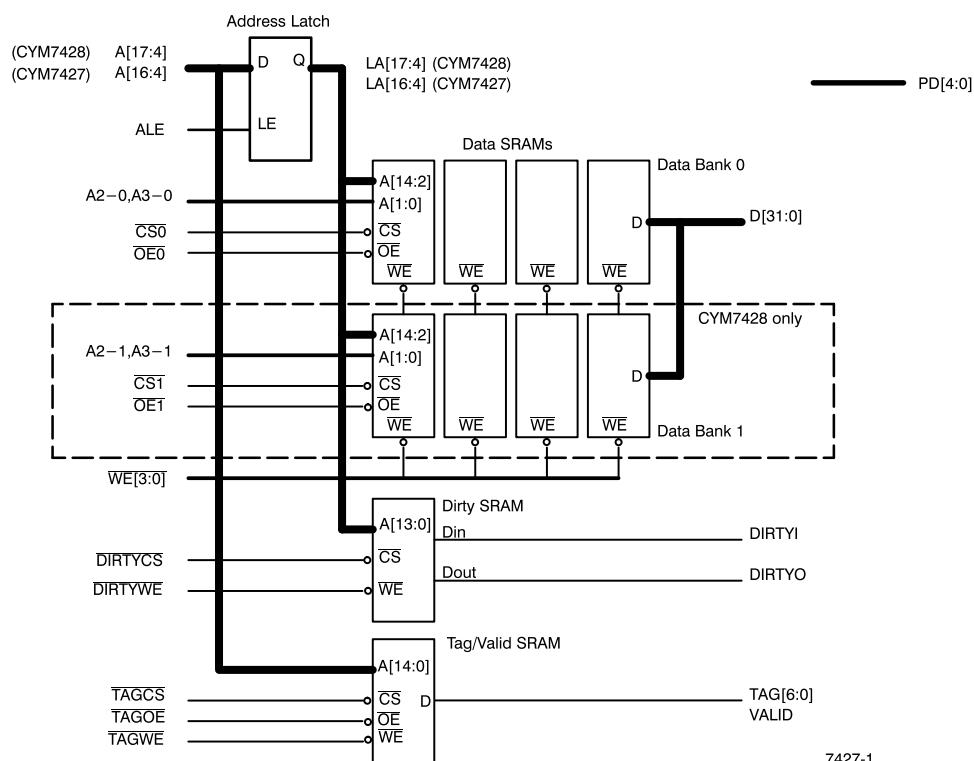
The CYM7427/28 module series is a family of cache memory subsystems for Intel 486-based systems. The CYM7427 (128 Kbytes) contains one memory bank organized as 32K by 32. The CYM7428 (256 Kbytes) contains two banks for interleaved operation. In addition, each module contains one 8-bit wide SRAM, supporting a 7-bit tag and one Valid bit, and a single-bit, separate I/O SRAM supporting a Dirty bit. The address signals for the Data and Dirty SRAMs are latched.

The 7427/28 is configured as a 112-pin card-edge memory module. It is

constructed using standard asynchronous SRAMs in SOJ packages mounted on an epoxy laminate substrate. The module dimensions are 3.145 inches long by 1.105 inches high by 0.365 inches thick.

These modules are designed for zero-wait-state operation in 486-based systems operating at a bus speed of 33 MHz. They are designed for compatibility with the Intel 82420 PCIset and other chip sets. The baseline speed grade is built using 12-nanosecond Tag SRAMs and 20-nanosecond Data SRAMs.

Logic Block Diagram



7427-1

Selection Guide

	CYM7427PB-20	CYM7428PB-20
Cache Size (KB)	128	256
Data SRAM (ns)	20	20
Dirty SRAM (ns)	15	15
Tag/Valid SRAM (ns)	12	12