Faraday Electronics

FE2010
PC BUS CPU & PERIPHERAL CONTROLLER
INTEGRATED CIRCUIT

- 100% Hardware & Software compatible with the IBM-PC

- 8284 Clock Generator

- 8288 BUS Controller

- 4 DMA Channels

- 8 Interrupt Channels

- 3 timer Channels

- 84 Pin J-Type Leaded Surface Mount Plastic Chip Carrier

- Keyboard Port

- Complete CPU control logic

- System configuration register eliminating external switches

- 256K & 64K RAM support

- HCMOS Technology

- TTL Compatible

Product Overview

The Faraday CPU & Peripheral controller integrated Circuit (FE2010) is a highly integrated chip that allows designers to easily build a IBM compatible PC or XT single board computer.

The FE2010 has been designed for OEMs who would like to reduce cost, lower power requirements, increase reliability, and reduce board size over that of a functionally equivalent IBM PC or XT motherboard. The FE2010 replaces a total of 49 components, while reducing the size of a typical PC/XT motherboard by 77%.

The FE2010 replaces functionally five Intel peripheral controller I C's in a motherboard(8284 Clock Generator, 8288 BUS Controller, 8259A Interrupt controller, 8237A DMA controller & 8253 Timer). In addition, it supports both 64K and 256K memory types and has an internal configuration register to replace external switches in the board design.

The FE2010 is a 2 micron CMOS gate-array packaged in an 84 Pin J- type Leaded Surface Mount Plastic Chip Carrier (mating socket Burndy part number QILE84P10).

FE2010 Chip Replacement Chart

8288	74LS175(2)	74LS74(4)
8259A	74LS138(3)	74LS30(2)
8284A	74LS244(2)	74LS00(1)
8237A	74LS670	74LS08(3)
8253	74LS322	74LS158(2)
8255A	74LS125(2)	74LS139
DELAY-LINE(1)	74LS10	74LS32
74S280	74LS11	74S08
74LS373(2)	74LS04(4)	74LS14
74LS245(3)	74LS02(1)	SWITCHES(2)

No. of chips replaced = 49