

# **FE3010 AT BUS CPU and PERIPHERAL CONTROLLER INTEGRATED CIRCUIT**

- **100% Hardware and Software compatible with the IBM PC-AT**
  - **15 Interrupt Channels**
  - **Real Time Clock/Calender**
  - **3 Timer Channels**
  - **7 DMA Channels**
  - **84 Pin J-Type Leaded Surface Mount Plastic Chip Carrier**
  - **TTL Compatible**
  - **6, 8, or 10 Mhz with 0, 1, or 2 Wait State Capability**
  - **256K or 1MB Ram Chips**
  - **DMA Page Registers**
  - **HCMOS Technology**
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# Product Overview

The Faraday AT CPU & Peripheral Controller Integrated Circuit (FE3010) is a highly integrated chip with various control and peripheral functions. The FE3010 has been designed to replace 21 chips.

The FE3010 has been designed to enhance the IBM PC AT while being extremely flexible. The FE3010 is able to run at 6, 8, or 10 Mhz clock speed with 0, 1, or 2 Wait States. The FE3010 is also capable of utilizing 256K or 1MB ram chips.

The FE3010 used in conjunction with Faraday's FE3000 (PC AT CPU controller IC) will reduce the size of a typical PC AT motherboard by 80 %, power by 70 % and the component count by 62 % . The FE3010 and FE3000 have been designed to be upward compatible with the Intel 80386 processor.

The FE3010 is a sub 2 micron Standard Cell device packaged in an 84 pin J-Type Leaded Surface Mount Plastic Chip Carrier (mating socket Burndy part number Q1LE84310).

## Chip Replacement Chart

i8237(2)
i8259(2)
8254
M146818
74LS612
74LS590
74LS00(3)
74ALS10
74F00
74LALS573(2)
74LS125
74ALS08
74ALS245(3)
74S288

No Of Chips Replaced: 21