METHOD AND APPARATUS FOR OPERATING A SINGLE CPU COMPUTER SYSTEM AS A MULTIPROCESSOR SYSTEM

A method and apparatus for upgrading a uniprocessor system to a multiprocessing system simply by the insertion of a second microprocessor integrated circuit. The computer system is provided with an upgrade socket for receiving the second processing unit, as well as a private communications bus between the upgrade socket and the existing processor for handling interprocessor communications, bus arbitration and cache coherency, etc. The addition of the second processor is transparent to the system which maintains its memory management unit and caching system and other arrangements as though it were still a uniprocessing system. Therefore, an inexpensive method and apparatus are provided for greatly enhancing the speed of a uniprocessing system to that of a multiprocessing system without the cost traditionally associated with multiprocessing systems.

(Figure 2)