The misadventures of x86.

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Abstract

Introduction

History

In 1978, Intel released a 16-bit microprocessor chip called the Intel 8086. The 8086 project began in May 1976 as successor to the 8080 8-bit microprocessor and temporary solution to the iAPX 432 commercial failure. A new architecture was defined by Stephen P. Morse with the assistance of Bruce Ravenel. This architecture was created to support full 16-bit processing and maintain backwards compatibility with the 8080 and 8085 architectures. Making it possible to automatically convert source code with little to no user editing. In addition, new instructions were included such as microcoded multiply and divide, full support for signed integers, self-repeating operations, and base plus offset addressing. This architecture was named "x86" after Intel's successor microprocessor chips ending with the number 86. Currently x86 is still used for low-level programming and a majority of mobile devices utilize the x86 architecture. [1]

Control Structures

Data

Subprograms

Summary

References

1. Leo J Scanlon. *8086/8088/80286 assembly language*. New York, N.Y. : Brady Books : Distributed by Prentice, 1988.