

National Semiconductor Microsystem 6600

National Semiconductor Microsystem 6600

[Vin11]

The National Semiconductor Microsystem 6600 was notable for its support of basic multitasking, allowing it to run multiple programs simultaneously—a rare feature for microcomputers of its era. Its claim to fame lies in this innovative multitasking capability, which marked a step forward in personal computing usability, efficiency and contributed to the development of microcomputers in industrial settings, representing an early example of using computers for automation, data management, and control in business and manufacturing environments.

- **Manufacturer:** National Semiconductor
- **Type:** Rackmount microcomputer
- **Release Date:** 1974-1976

Hardware Specifications

- **CPU:** National Semiconductor IMP-16

Notables

The National Semiconductor Microsystem 6600 was an early computer system designed primarily for business and industrial applications in the 1970s. Here are some interesting facts about this system:

- **Launched in the 1970s:** The Microsystem 6600 was introduced by National Semiconductor as part of its early entry into the microcomputer market, during a time when computing was evolving rapidly.



- **Based on the IMP-16 Architecture:** The system was built around National Semiconductor's IMP-16 architecture, an early 16-bit microprocessor that was among the first commercially available 16-bit CPUs. This made it powerful for its time, capable of handling more complex calculations and data processing compared to earlier 8-bit systems.
- **Aimed at Business and Industrial Users:** The Microsystem 6600 was designed for use in industrial and business environments where automation and data processing were key. It found applications in data collection, industrial control, and laboratory settings, where it could automate processes or handle repetitive tasks.
- **Modular and Expandable:** Like many early computer systems, the Microsystem 6600 was modular, with options for expansion that allowed users to add peripherals and memory as needed. This flexibility helped it appeal to businesses with growing needs.
- **Support for Multitasking:** One of the innovative aspects of the Microsystem 6600 was its ability to handle basic multitasking, which allowed it to run multiple applications or processes simultaneously—a rare feature for computers in the early 1970s.
- **Operating System and Software:** National Semiconductor developed a custom operating system and software tools specifically for the Microsystem 6600. It supported high-level programming languages like FORTRAN and BASIC, making it more accessible for technical and business professionals who needed programmability without delving too deeply into machine code.
- **Rugged Build for Industrial Use:** The Microsystem 6600 was physically designed to withstand industrial environments, with a durable enclosure and components intended to handle the rigors of manufacturing or laboratory work.
- **Role in Advancing Semiconductor Technology:** National Semiconductor used the Microsystem 6600 as a showcase for its semiconductor technology. The company was a leader in early microprocessor development, and the 6600 was one of its flagship products, demonstrating the power and flexibility of National Semiconductor's chipsets.
- **Limited Widespread Adoption:** Despite its innovative features, the Microsystem 6600 did not achieve widespread popularity outside industrial and business niches, as the personal computer market was still in its infancy and focused more on smaller, general-purpose systems.
- **Legacy and Influence:** The National Semiconductor Microsystem 6600 is remembered as an influential system that pushed forward the capabilities of early business and industrial computing. It helped establish National Semiconductor's presence in the microcomputer market and paved the way for more specialized systems that followed.

Donated by: Arlen Michaels

SCHOOL OF COMPUTER SCIENCE
5302 HERZBERG LABORATORIES
CARLETON UNIVERSITY
1125 COLONEL BY DRIVE
OTTAWA, ON, K1S 5B6

SCS SUPPORT | PHONE: 613-520-4333

FAX: 613-520-4334

HOURS: 8:30-16:30

[VIEW MAP](#) | [CONTACT US](#)