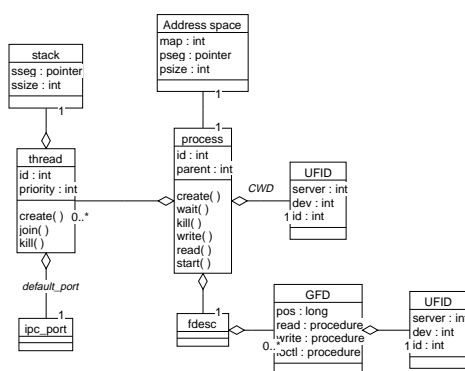


# OS-X 2.0 Quick Facts

## 1.0 Overview

OS-X 2.0 is a general purpose realtime operating system for Zilog Z80/180/280 based microcomputer systems. Priority-based preemptive and round robin time sharing scheduling is supported. OS-X is a micro-kernel architecture using RPC and message queues for most services. Some simple, yet powerful mechanisms are used to support a location-transparent distributed file system. POSIX compliant file and thread services are available through kernel extensions based on RPC and user-level server processes.



## 2.0 Key features

- Thread-based preemptive scheduling with 256 priority levels.
- POSIX threads and semaphores.
- Priority inheritance for mutex semaphores and message queues to prevent priority inversion.
- Zero-copy and structured interfaces for message passing.

## 3.0 Distribution

OS-X is distributed as a collection of pre-compiled object files and the corresponding interface source files. Complete technical documentation is also included. All OS-X entry points, library functions and RPC interfaces are documented to allow the end user to add kernel extensions as needed.

- Fast context switch and low interrupt latency. (~100us for Z180 @ 20MHz).
- Kernel interface based on RPC and message passing.
- POSIX interface for distributed file system.
- Optional file system using CMOS RAM, FLASH EPROM, floppy or remote storage media over network.
- File system, network protocols, device drivers etc managed by user-level server processes.
- Dynamic configuration of file system through the use of mount/unmount commands and RPC.
- Dynamic process and thread creation. Support for dynamic loading of relocatable code from file or direct RPC feed.
- Dynamic memory management with support for bank switched physical memory or MMU.
- Small memory footprint, scales from 48kB for full kernel without local file system.