

Task Management:

- Number of tasks only restricted by available memory
- Priority-based scheduling (254 priority levels), optionally in combination with time slicing (Round Robin)
- dynamic priority change
- deterministic behaviour
- extremely short task switch times

Task Synchronization and Coordination:

- Semaphores
- Event Flags
- Signals
- Mailboxes
- Pipes

Memory Management:

- Megapools
- Memorypools
- Fixed-Sized-Buffers
- Shared Memory

Other services:

- Console services,
- Bit processing,
- Watchdogs,
- Interrupt services (prologs, state transitions),
- Object management.

Run-time coordination with the operating system:

- synchronous (wait for completion)
- asynchronous (parallel execution, different types of signaling)
- multiple wait using the cluster concept
- time-out for all system calls while waiting
- time-delayed system calls

Comprehensive driver interface:

- All services of the I/O system and all coordination mechanisms are available for all drivers without extra effort by the driver implementor.
- Services like task coordination, request queue management and timeout handling are performed by the I/O system. Implementing a driver is reduced to programming the device-dependent functions only.

Code size (scalable operating system):

from 10 KByte (depending on required functionality)

RAM size:

- Data areas can be configured individually and contain dynamically created system objects. min. 4 KBytes.

Test and debug support:

- OS version containing additional checks and output.
- OS version with support for event tracing and visualisation in the EUROScope debugger.

Architectures supported:

EUROS versions for the following CPU architectures exist:

16 Bit:

- Infineon **C16x** and **XC161x**
- Intel **x86**
- Fujitsu **F16LX**
- Mitsubishi M16C2x/6x.

32 Bit:

- Infineon **TriCore**
- Motorola **68k**
- ARM
- Intel **x386** (IA 32),
- Motorola **68k**,
- Motorola **PowerPC**
- Fujitsu **FR32**
- other architectures by request

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