

### **Department of Embedded Systems**

## **MicroC/OS-II**

# Realtime / Multitasking Operating System for Microprocessors and Microcontrollers

#### **General Features**

- Priority based Task-Scheduling
- Preemptive Task-Scheduling
- Efficient Memory Management
- Highly Scaleable
- Deterministic Execution Times
- ROMable Applications
- Large Number of Ports
- FAA Certification
- MISRA C Compliance

**Task Management** 

#### Task State Diagram



#### Intertask Communication & Synchronization

- General Semaphores
- Mutual Exclusion Semaphores
  - Mailboxes
  - Message Queues
    - Event Flags

#### **Interrupt Processing**



Jean J. Labrosse, "MicroC/OS-II The Real-Time Kernel". CMP Books, 2<sup>nd</sup> Edition, ISBN 1-57820-103-9 http://www.ucos-ii.com



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