Computing

OPTIMIZING PERFORMANCE IN CRITICAL EMBEDDED SYSTEMS

Efficient system in critical environments (multicore and frequency)

Technological benefits

Multicore management

Adaptation of processor frequency to the immediate need for a lower energy consumption.
Optimization of multicore management in critical environment.
Innovative abd dynamic allocation of process between cores.

Standards respect

Time and space partitioning (TSP, ARINC653)

Invention overview

Optimization of multicore planning and managing in a critical environment, allowing better process distributions in time to lower energy consumption.

Potential applications

Critical environments (airplane, drone, etc.)

Network routers

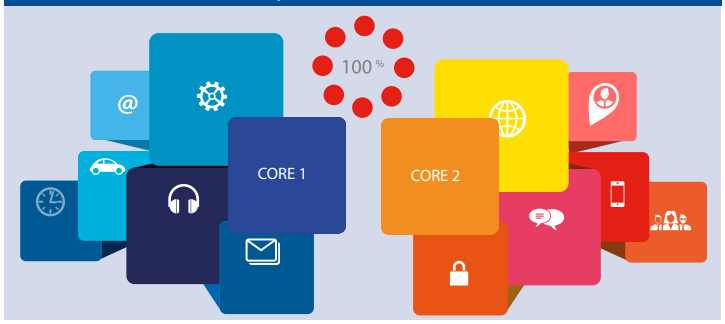
Commercial benefits

Evolution of existing single core systems to multicore.
Optimization of process in critical environment.

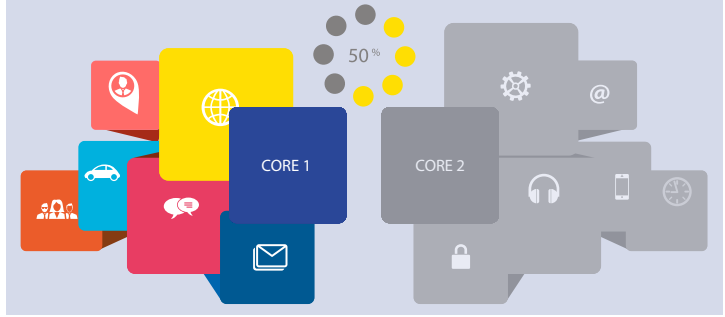
Productivity

Time savings, reduced energy consumption.

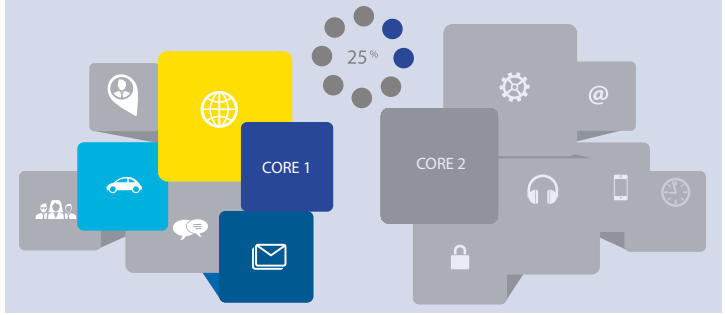
1. MAXIMUM OPERATING
The most efficient distribution of process between the two cores.



2. MEDIUM OPERATING
Grouping of processes on the core 1, core 2 off: energy gain.



3. LOW OPERATING
Decreased frequency heart 1.



TRL : 3
TSP - ARINC653
Invention available under license.

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For further information

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