



COPCAMS

COgnitive & Perceptive CAMeras

EXECUTIVE summary

COPCAMS leverages recent advances in embedded computing platforms to develop large scale vision systems based on embedded platforms to power a new generation of vision related smart cameras and gateways.

RELEVANCE CALL objectives

COPCAMS will advance computing platforms for embedded systems by exploiting embedded architectures with a programmable accelerator to power a new generation of vision related devices (smart cameras and gateways). This will represent a significant step towards wider adoption a key enabling technologies to build smart environments.

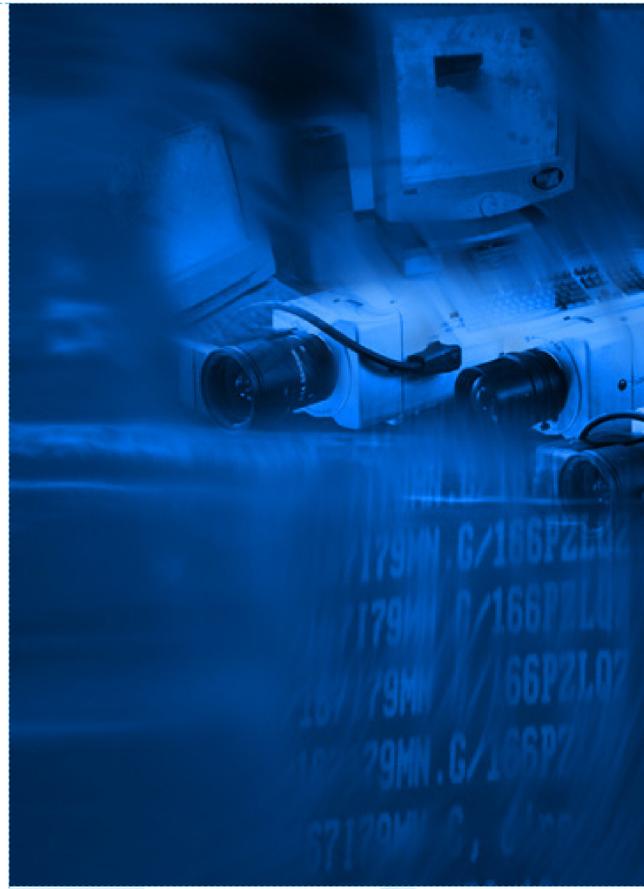
MARKET innovation

COPCAMS will leverage a large spectrum of innovative technologies in the field of low-power high performance embedded systems and perception/vision embedded techniques to enable several markets: Tools and libraries providers will grow an ecosystem of users and will have the possibility to explore new markets opportunities; System integrators will benefit from the platforms used in COPCAMS and will be able to offer a new generation of vision related products. Service providers will capitalize on the COPCAMS system to provide value added services, way beyond what can be offered today. This will reinforce European leadership in innovative products (eg. surveillance systems) and services (eg. advanced manufacturing).

TECHNICAL innovation

COPCAMS' flexible programming model will be more effective than what is offered today based either on tools for a specific embedded processor and GPU or on FPGAs. This will allow for cognitive and perceptive video systems that will be powerful and able to sustain complex vision analytics and video encoding functions

COPCAMS will propose tools and libraries and solutions for image and video analysis, codecs and multi-sensors analysis: pre-processing steps; object classification and recognition; video understanding; highly-parallel video coding schemes; sophisticated data fusion; detection, tracking.



PROJECT COORDINATOR Christian Fabre	START April 2013
INSTITUTION Commissariat à l'énergie atomique et aux énergies alternatives	DURATION 36 months
EMAIL coord@copcams.eu	TOTAL INVESTMENT € 15.1 M
WEBSITE http://copcams.eu	PARTICIPATING ORGANISATIONS 21
	NUMBER OF COUNTRIES 7

