MANYCORELABS | Software tools for Manycore embedded platforms

Generic embedded computing platforms based on "manycore" processors or accelerators are very promising for high performance embedded applications in the area of image & video processing, signal processing and telecom infrastructure. Availability of efficient software development tools remains a key challenge for these emerging platforms. The integration and maturation of several software development solutions around the MPPA manycore platform is the main objective of the ManycoreLabs project

The proposed solutions will be demonstrated on a set of complementary applications in the area of:

◗ Video transcoding

◗ Sound broadcast platforms

◗ Driving assistance systems for Automotive

◗ Software radio

TECHNOLOGICAL OR SCIENTIFIC INNOVATIONS

Technological innovations will be developed in found directions

◗ High level development environments for manycore platforms: dataflow programming, openMP, Java

◗ Performance and power consumption optimization

◗ Support of acceleration application, use of multi-chip manycore acceleration platforms for video processing or scientfic computing applications

◗ Support of heterogeneous & dynamic applications
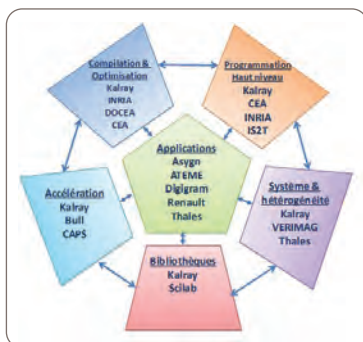
STATUS - MAIN PROJECT OUTCOMES

The project will start in March 2012 and will last three years. First technology or application demonstrators will be available in 2013.

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Research institutes, universities:
CEA, INRIA, VERIMAG

PROJECT DATA

Coordinator:
KALRAY

Co-label:
MINALOGIC

Call:
BGLE1

Start date:
March 2012

Duration:
36 months

Global budget (M€):
28

Funding (M€):
14.9

Related Sytematic project(s):
CHAPI