

ParMA

Parallel Programming for Multi-core Architectures

SUBSTANTIAL IMPROVEMENTS IN CONVENTIONAL HPC APPLICATIONS

- Enable the simulation of much more complex models without increasing execution time (e.g. casting, metal forming).
- Reduce product engineering costs, for instance in the automotive industry, by making virtual process design much more efficient while requirements concerning crash safety, quality standards, weight reduction and time-to-market response are expected to increase.

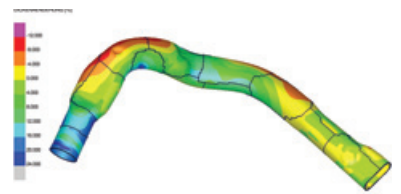
ADVANCED DEVELOPMENT OF POWER-INTENSIVE INNOVATIVE EMBEDDED APPLICATIONS

Examples

- Avionics: determine in real-time optimal wing configuration with regard to speed, drag and angle of incidence.
- Software Defined Radio: be able to adapt to changes in protocols and to process different kinds of data (audio, video,...) by using an MPSoC environment.



MAGMA – solidification of a break disc pattern



GNS – Hydroforming simulation of a main chassis beam



Dassault Aviation – FX7 aircraft



INDRA – software defined radio

CONTACT

Project Leader: Jean-Marc Morel

Bull SAS – Les Clayes-sous-bois, France ~ Tel: +33 130 80 74 48, Fax: +33 130 80 79 07

E-mail: Jean-Marc.Morel@bull.net ~ Website: www.parma-itea2.org