

# **AT697F LEON2-FT Flight devices**

## **Development plan**

**ESA contract 19083/05/NL/FM**

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# Overview

- Objectives
- Development plan
- Schedule

# AT697F rationales

## ■ Bug corrections

- All the bugs described in the AT697E erratasheet will be corrected

## ■ ATC18RHA library

- To allow total dose test up to 300 krad (Si)
- To ensure appropriate process reliability monitoring

## ■ A few improvements

- Refer to previous presentation of ESA / Gaisler Research
- SDRAM interface speed
- ESD capability > 2000 V

## ■ Pinout compatible with AT697E

## ■ Packaging

- A flat pack package will be introduced in addition to MCGA349

# AT697F main tasks (1)

- **Specification and development plan**
- **Design Phase**
  - **Synthesis / simulations**
  - **Layout phase**
- **Manufacturing and assembly of engineering devices**
  - **Mask generation**
  - **Manufacturing of an engineering lot**
  - **Assembly of samples**
- **Electrical characterisation and validation**
  - **Full bias and military temperature ranges**
  - **Application tests**
    - **Update of the evaluation board**
    - **Improvement of the tools offering**

# AT697F main tasks (2)

## ■ Space Qualification

- QML Q, QML V, ESCC screening
- Product variability with process variation
- Analysis of rejects / read&record

## ■ Radiation characterisation

- Total dose
- Single Event Effects (heavy ions and protons)
- CNES contract

## ■ Evaluation

- CNES contract

### Key dates

- September 06 : New LEON2-FT model delivered by ESA
- Q2 2007 : AT697F Samples
- Q4 2007 : AT697F FM (order entry)

**The end**

**Thank you for your attention !**