PROJECT

THERMAC

Thermal-aware Resource Management for Modern Computing Platforms in the Next Generation of Aircraft

Funding: European (Horizon 2020)

Duration: Apr 2019 - Sep 2021

Status: Complete

Total project cost: €793,375

EU contribution: €793,375

Call for proposal: H2020-CS2-CFP08-2018-01

CORDIS RCN : 221234

Objectives:

The THERMAC project aims to investigate, develop, and validate emerging thermal-aware software-based techniques that will reduce operating temperature of avionic computing platforms in small aircraft transports. The project specifically targets the integration of multicore and GPU-based platforms in avionics from a thermal perspective. The expected impact of the improved thermal performance will improve dependability, computing performance, and will reduce size and weight of electronics due to relaxed dissipation requirements and the higher number of functionalities that can be integrated in the same computing platform.

Parent Programmes:

H2020-EU.3.4. - Horizon 2020: Smart, Green and Integrated Transport

Institute type: Public institution

Institute name: European Commission

Funding type: Public (EU)

Other programmes: JTI-CS2-2018-CfP08-SYS-03-17 Improved Thermal Properties of Computing Platforms for Next-Generation Avionics [SAT]

Lead Organisation:

Instituto Superior De Engenharia Do Porto

Address:
RUA DR ANTONIO BERNARDINO DE ALMEIDA 431
4200-072 PORTO
Portugal

EU Contribution: €443,125

Partner Organisations:

Ceske Vysoke Uceni Technicke V Praze

Address:
JUGOSLAVSKYCH PARTYZANU 1580/3
160 00 PRAHA
Czech Republic

Organisation Website:
http://www.cvut.cz

EU Contribution: €350,250

Technologies:

Aircraft operations and safety
Avionics

Development phase: Research/Invention

STRIA Roadmaps: Vehicle design and manufacturing

Transport mode: Air transport

Transport sectors: Passenger transport, Freight transport

Transport policies: Other specified

Geo-spatial type: Other