

Space Technology Mission Directorate
Game Changing Development Program

Robust Multicore Middleware (RMM)

Project Overview

SBIR Consecutive Phase II
Lunar award to mature Troxel
Aerospace's Robust Multicore
Middleware (RMM) to enable
NASA missions that require
COTS Graphics Processor
Units (GPUs) to operate
through radiation-induced
upsets.

Technical Approach

Engage with programs of
interest to set requirements,
integrate the RMM with
applications of interest, mature
the software to NPR1750.2D
Level B, and radiation test the
system to achieve TRL level 8.

Contributing Partners and/or Infusion Plans

- NASA Johnson astronaut displays programs
- NASA JPL Next-generation Mars Helicopter
- NASA Ames Distributed Spacecraft Autonomy (DSA) Simulator

Additional Information

TRL 7 of astronaut displays
application demonstrated
through radiation testing at
Texas A&M Cyclotron

