

# Lynx – High Performance Single Board Computer

Lynx is a high performance general purpose single board computer, designed for critical tasks in a harsh radiation environment, with flexible communication, interface and mass storage capabilities. The processing capability is provided by the quad core ARM processor delivering more than 30.000 DMIPS. Mission specific functions can be implemented through the field programmable gate array (FPGA) allowing in orbit re-programmability.



*Lynx prototype board*

## RUAG SPACE HERITAGE

- >3000 failure free equipment years in orbit
- >300 Launcher On-Board Computers
- >120 Satellite Data Handling Systems

Applications include

- Artificial Intelligence
- Software Defined Radio
- Image Processing and Compression
- LEO, MEO, GEO & Deep space
- Telecom satellites
- Visual Navigation & Autonomous Control
- Payload Computer
- Manned space

## KEY FEATURES

- Quad core ARM processor
- >30.000 DMIPS
- Up to 8 GiByte DDR4 processing memory with ECC
- Up 64 GiByte Flash memory with ECC
- High-performant rad-hard FPGA
- Flexible and scalable FPGA framework
- FPGA IPs available for various functions
- 512 MiByte DDR2 FPGA memory with ECC
- Fault mitigation support by FPGA
- High-Speed Serial Links (SERDES) 3 Gbps per lane
- Ethernet, UART and JTAG for SW development and test
- Flexible Mezzanine board interface
- Designed for 15 years in GEO orbit
- Form Factor: 6U SpaceVPX standard (VITA 78)
- ITAR free
- Component quality: ECSS Class 1, MIL Class Level S or equivalent
- Board support packages for VxWorks and Linux
- Operating system independent boot and driver software

## AVAILABILITY

- Qualification model in development
- Development kit available now
- Prototype boards for early development available upon request

