Space Edge Processor & dacreo AI Ecosystem

Blue Marble Communications (BMC) and BruhnBruhn Innovation (BBI) demonstrate a revolutionary advancement in Generative AI capabilities for space systems. BMC's radiation-hardened edge processing platform and BBI "*dacreo*" advanced AI software stack integrate seamlessly to provide an optimized execution environment for Generative AI and Deep Learning applications such as AIKO's deepSAR, the new enterprise suite for image processing directly on-board.
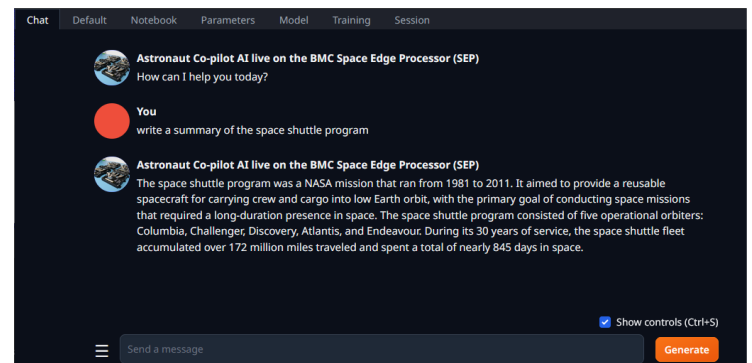

Space Edge Processor (SEP)

- Integrated CPU+GPU+FPGA processing
- AMD Ryzen V2748 (7nm) CPU+GPU
- AMD Versal (7nm) coprocessor FPGA
- 32GB DDR4 w/ ECC
- 2TB NVMe SSD
- Manufactured in high volume

BBI *dacreo* GPT

- An interactive astronaut co-pilot powered by an onboard Meta Llama 2 large language model
- Operating on BMC SEP Ryzen GPU platform with no access to the internet

AIKO *dacreo* deepSAR

- Real-time Synthetic Aperture Radar (SAR) stripmap processing and object tracking application
- Spaceborne computationally-efficient deep learning algorithms replacing traditional ground-based FFT-based focusing (RDA) for real-time spaceborne surveillance and monitoring intelligence