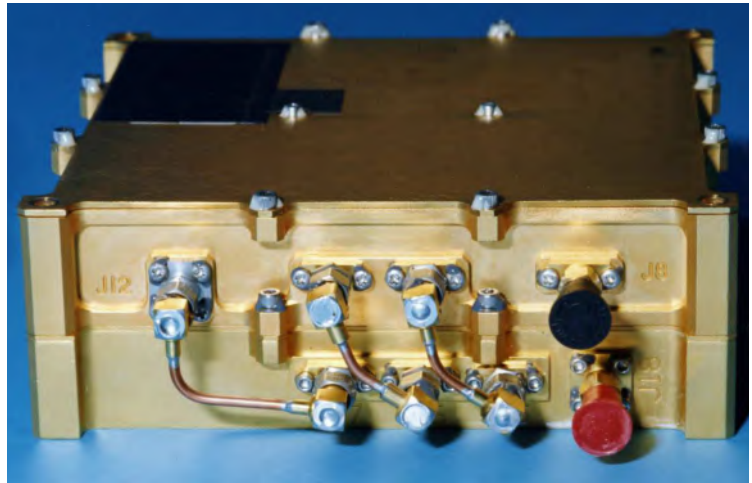


uSGLS™ Transponder

Space Micro's μ SGLS™ design is based on a flight proven SGLS design, representing the state-of-the-art in compact, radiation hardened SGLS transponders.

The μ SGLS is comprised of 2 "slices": the Transmitter and Receiver, which can interface to a third slice that is available from

the U.S. Air Force, the MCU-110 Encryptor. The encryptor can either be mounted on top of the μ SGLS, or alternatively mounted elsewhere on the spacecraft.



Features for Space

- Radiation Hardened
 - Total dose range
 - 30 to 100 krad
 - No SEL or SEFI (>120MeV/mg/cm²)
- Ruggedized for vibration, shock, & thermal reqt's of space.
- Temperature:
 - -24 to +61 °C
- Power Dissipation
 - Receiver
 - 4 W Operational
 - 2.5 W Standby
 - Transmitter
 - 23 W

Elements

- Transmitter: coherent PM RF carrier 2200 and 2300 MHz
- Receiver: PM RF carrier between 1760 and 1840 MHz
- Includes PRN ranging
- Mates to Industry COMSEC

Space Micro Inc

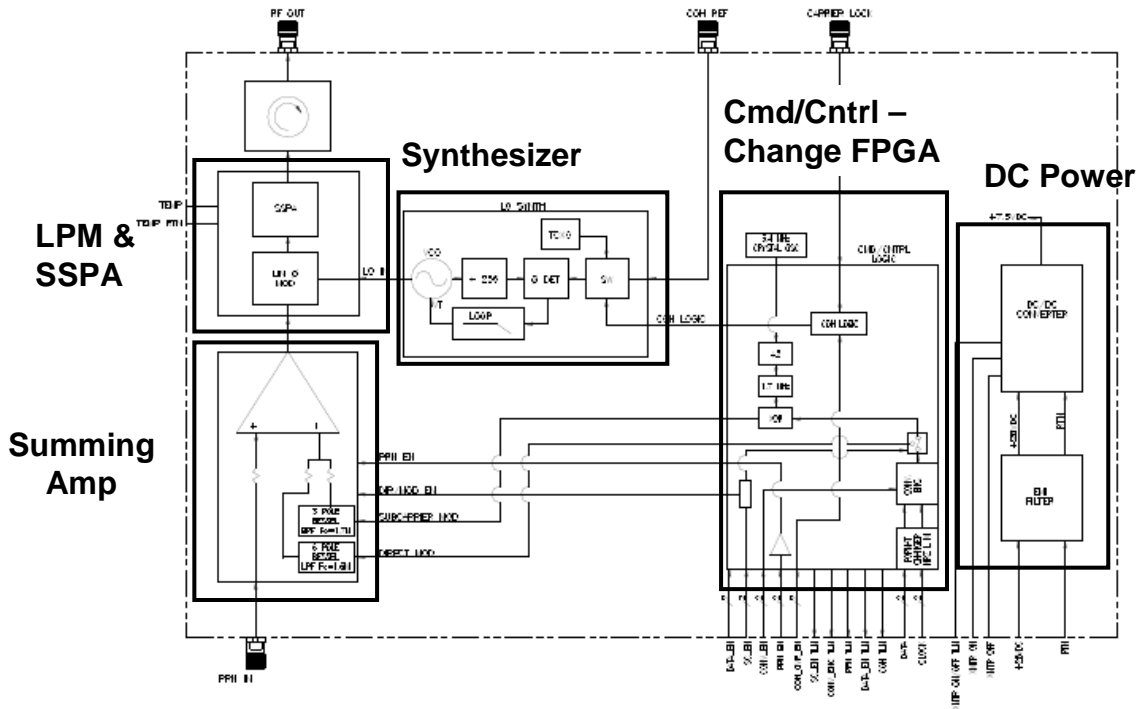
uSGLS™ 1000

10401 Roselle Street
Suite 400
San Diego, CA 92121

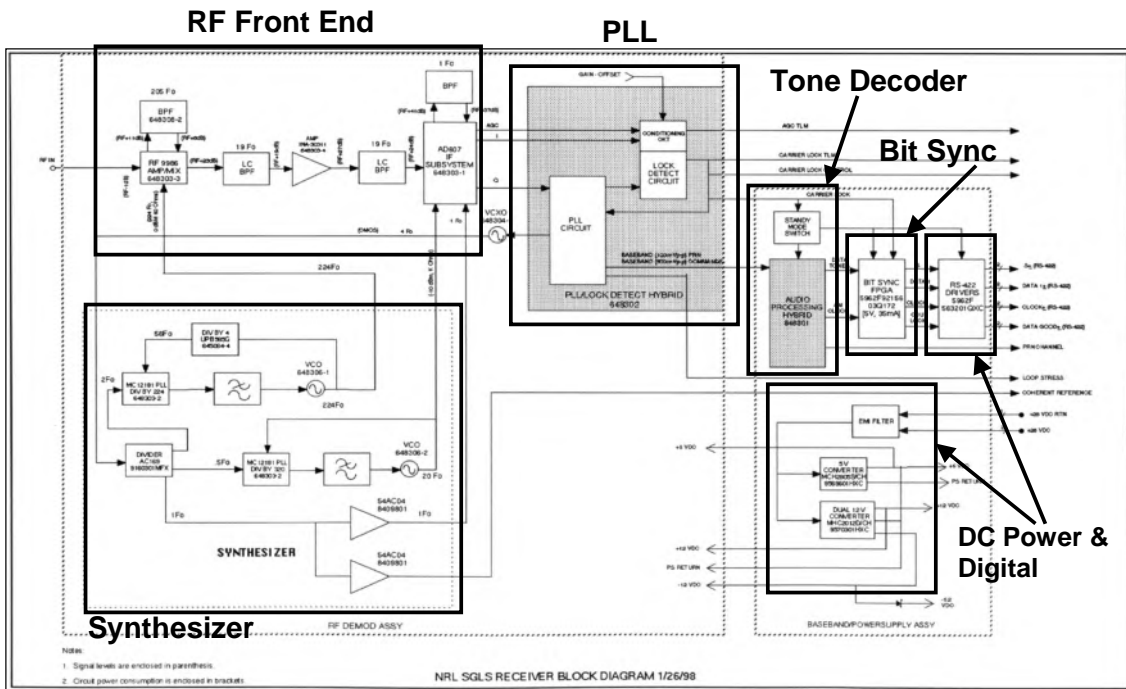
Phone: 858-332-0700
Fax: 858-332-0709
www.spacemicro.com



uSGLS™ Transponder

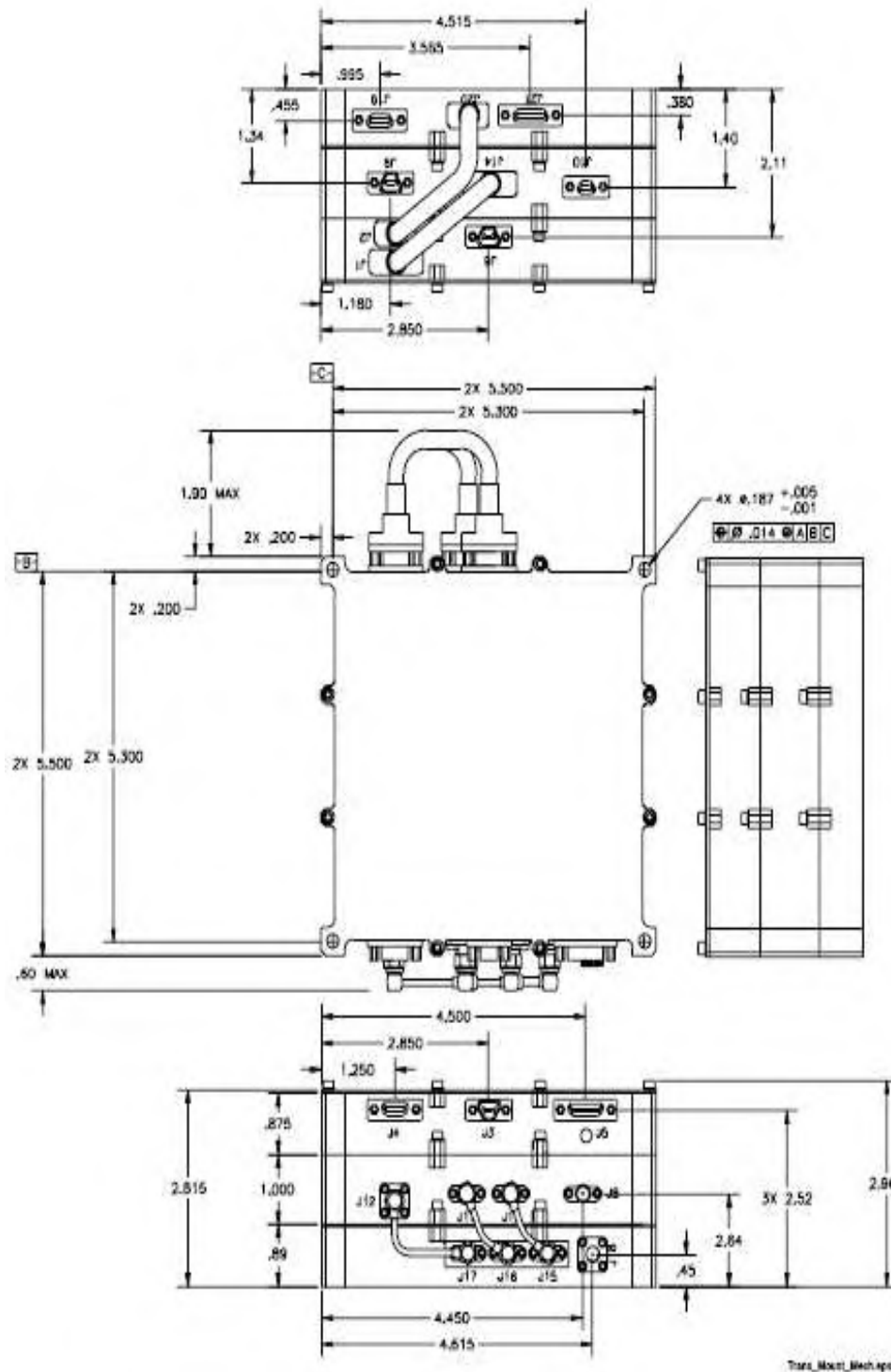


μSGLS Transmitter Block Diagram



μSGLS Receiver Block Diagram

uSGLS™ Transponder



μSGLS Mounting and Mechanical Interface

Trans_Mount_Mech.dwg

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