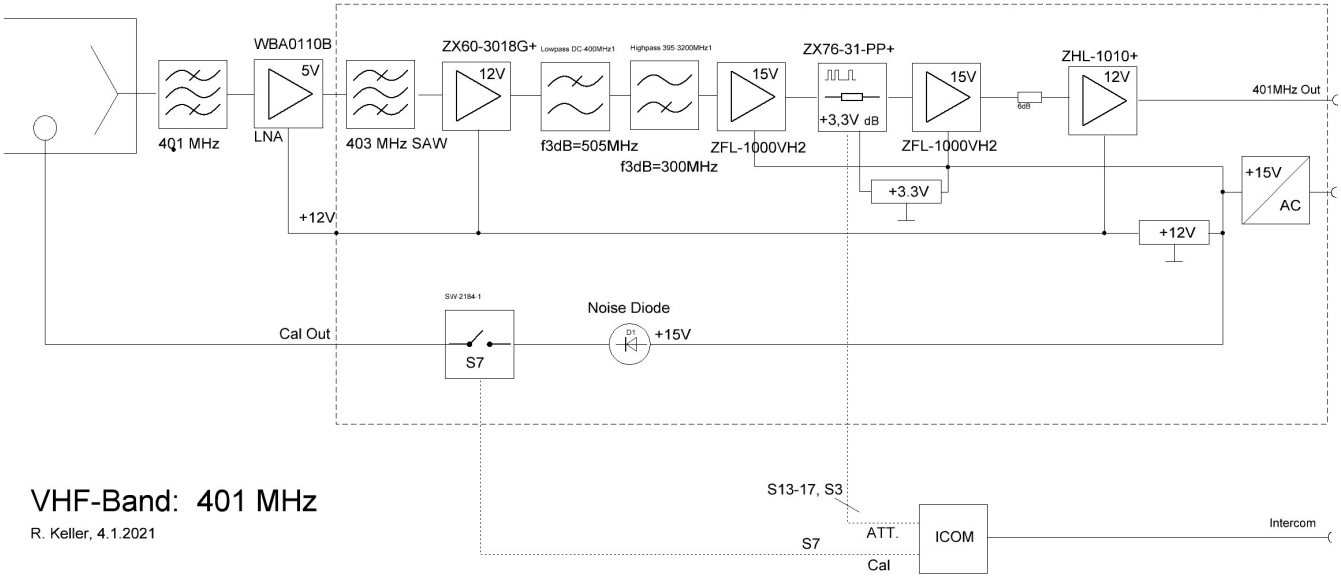
Technical Documentation of 74cm 401.5 MHz Receiver (P740mm)

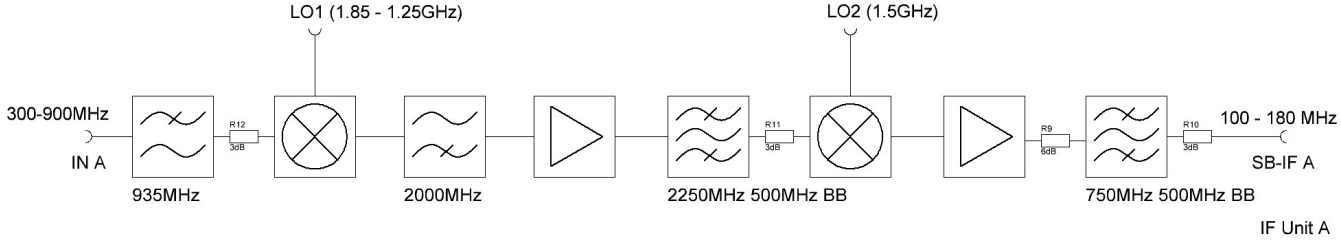
Type	HBT LNA, unclooled
Channels	1
Tsys	150K (Trec=100K)
RF Frequency Range	400 MHz - 405 MHz
Band Width RF Filter	401.5 MHz / BW 5 MHz
Polarization	RHC
Calibration	Noise Diode
Feed	Helix in a short circular waveguide stub
Output	400 - 405 MHz

Block Diagram

Receiver



IF Converter



Comments

> This receiver is a straightforward 401.5 MHz receiver with a very low bandwidth of <5 MHz and no down conversion. This receiver is specially designed for Mars lander missions to directly detect the

> telemetry signal of 401.5 MHz of the landing vehicle during the descent and landing phase of the mission. For continuum and VLBI measurements an analog converter module to an IF of 500 MHz to 1000 MHz is available.