CIAO RADIO MULTIMODE RECEIVER TEST SET

By Sistel

Introduction

- Ciao Radio is a Multimode HF Receiver and Test – Set
- As Multimode HF Receivers it is a SDR (Software Defined Radio) with two antennas input .
- Filtering and Demodulation of the signals is made from a PC connected to Ciao Radio trough an USB port
- This allows any kind of demodulation , filtering and postprocessing via Software

Ciao Radio as Test - Set

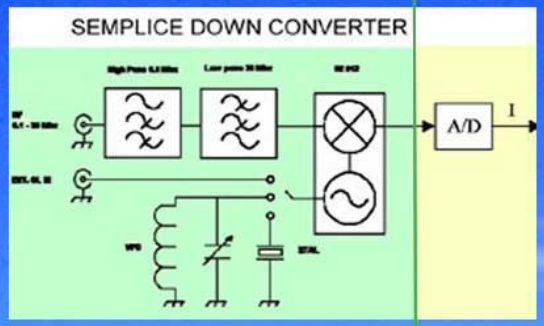
- Spectrum and Spectrogram analysis
- Generation of a CW carrier via DDS
- Spectrum recording for surveing and postmodulation purposes
- Audio Frequency analysis
- Recording of the amplitude of the signals and statistical analysis for propagation studies
- Measurements of the gain of antennas

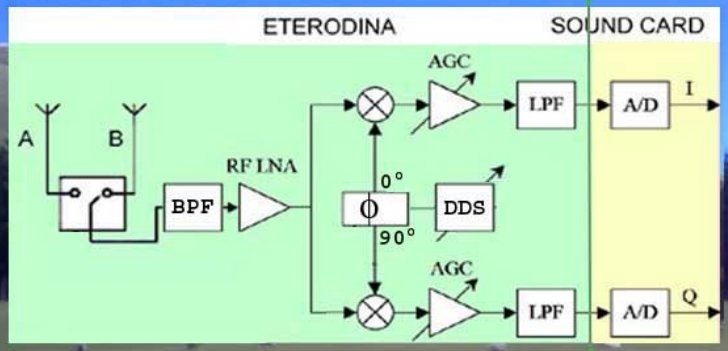
  (Line of Sight or even in Ionospheric Mode) .

CIAO RADIO Architecture

Hardware

RF





Software

CIAOradio

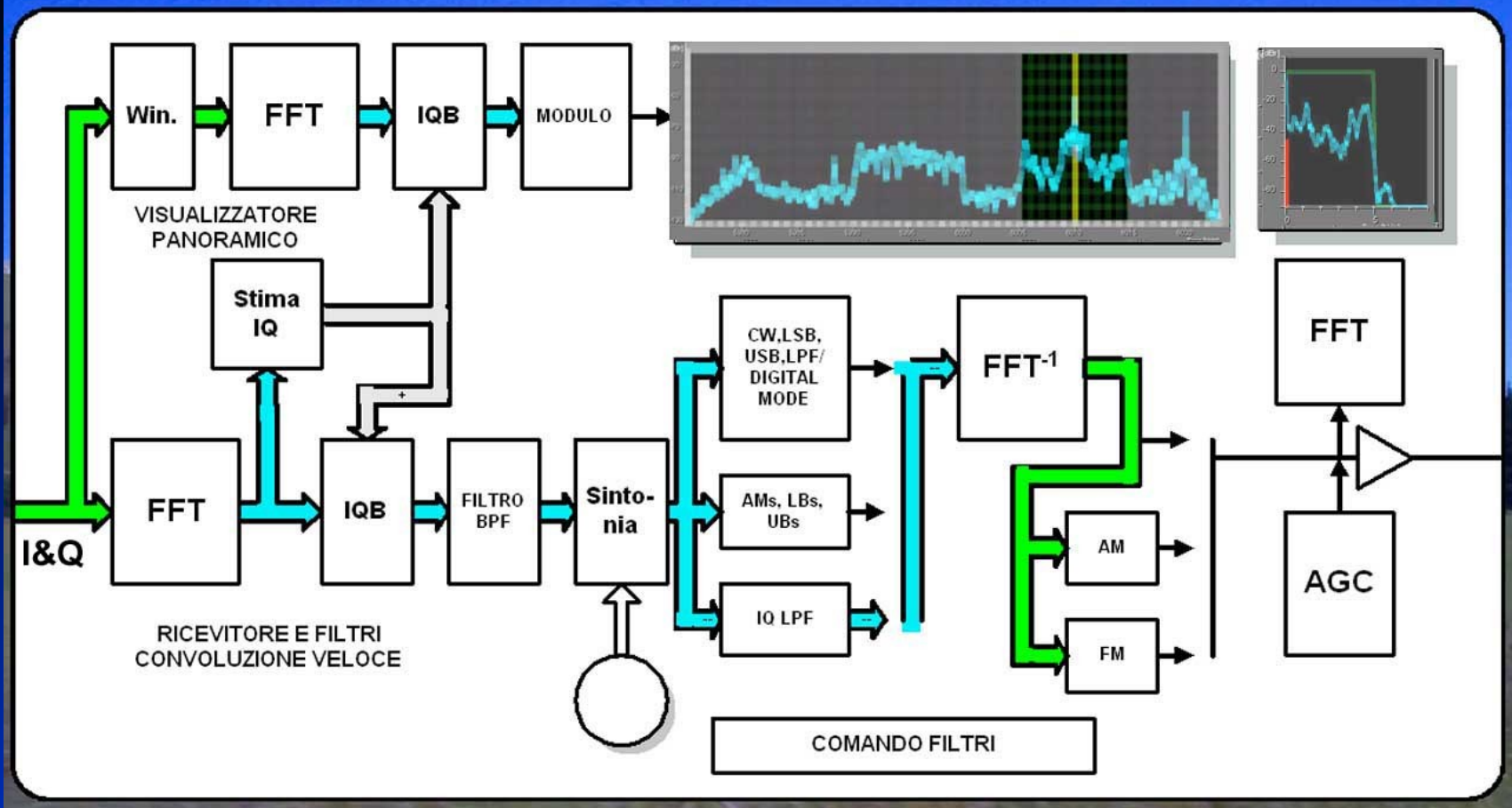
USB

Spectrum Analysis and Level Recording

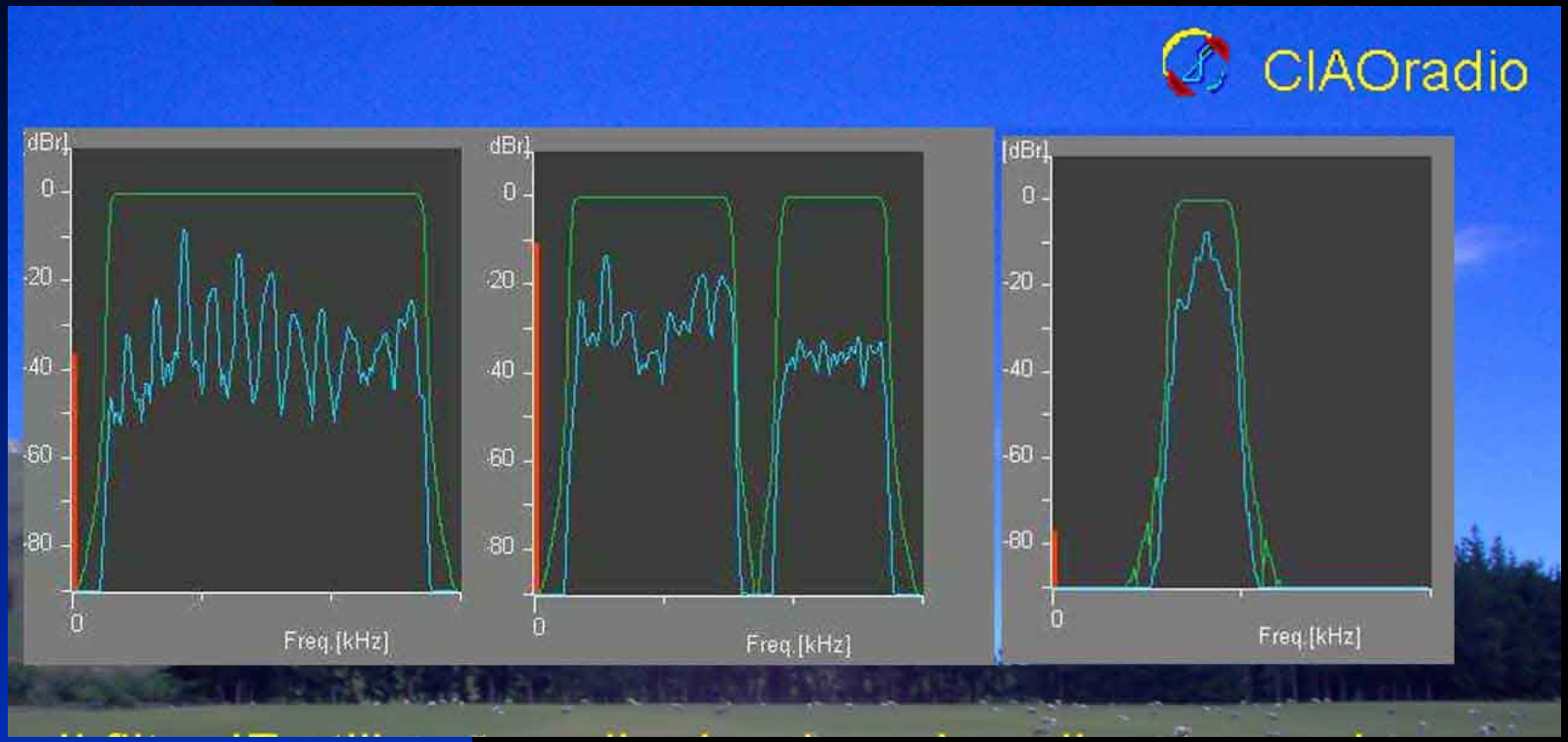
DSP

Digital Signal Processing

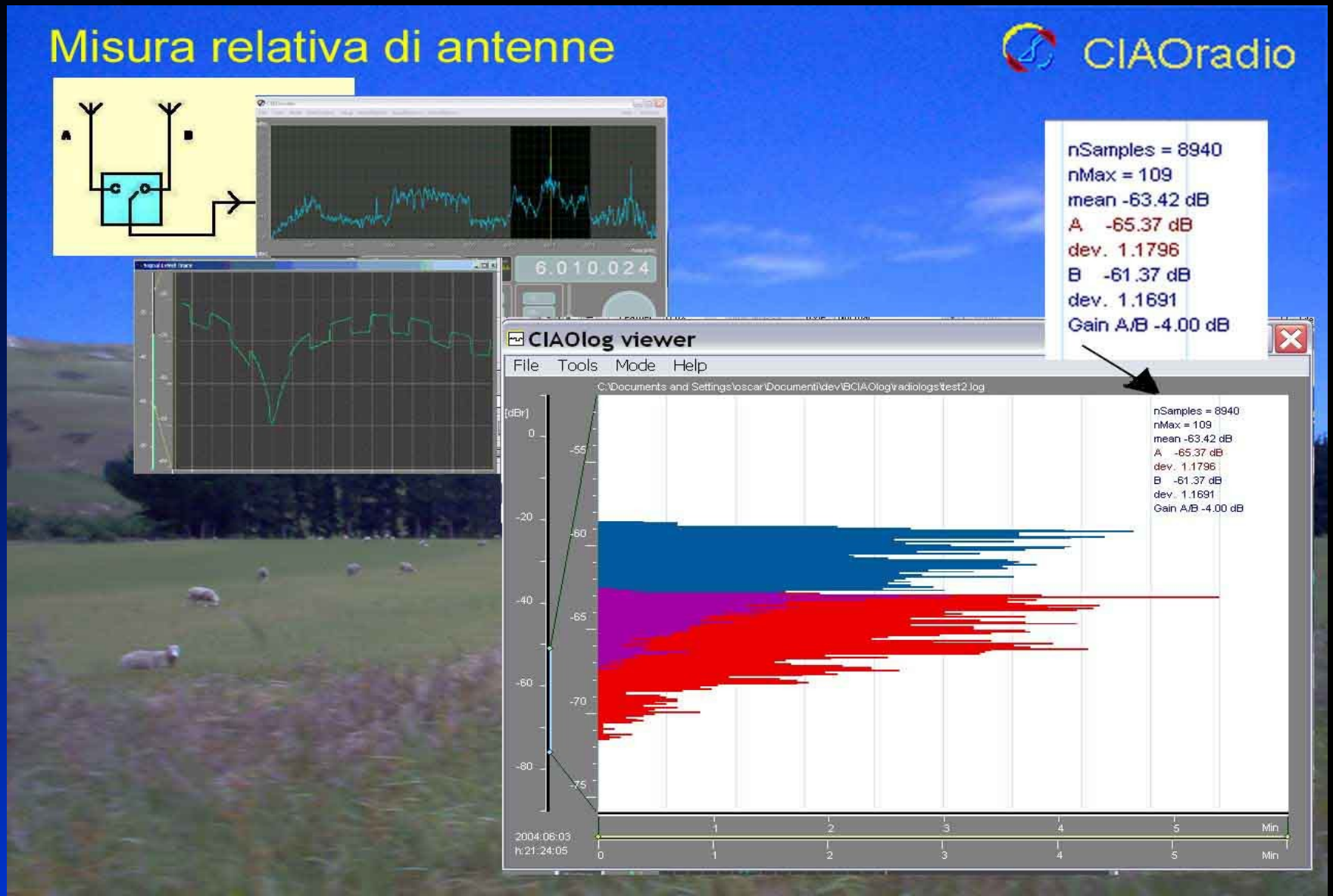
CIAOradio



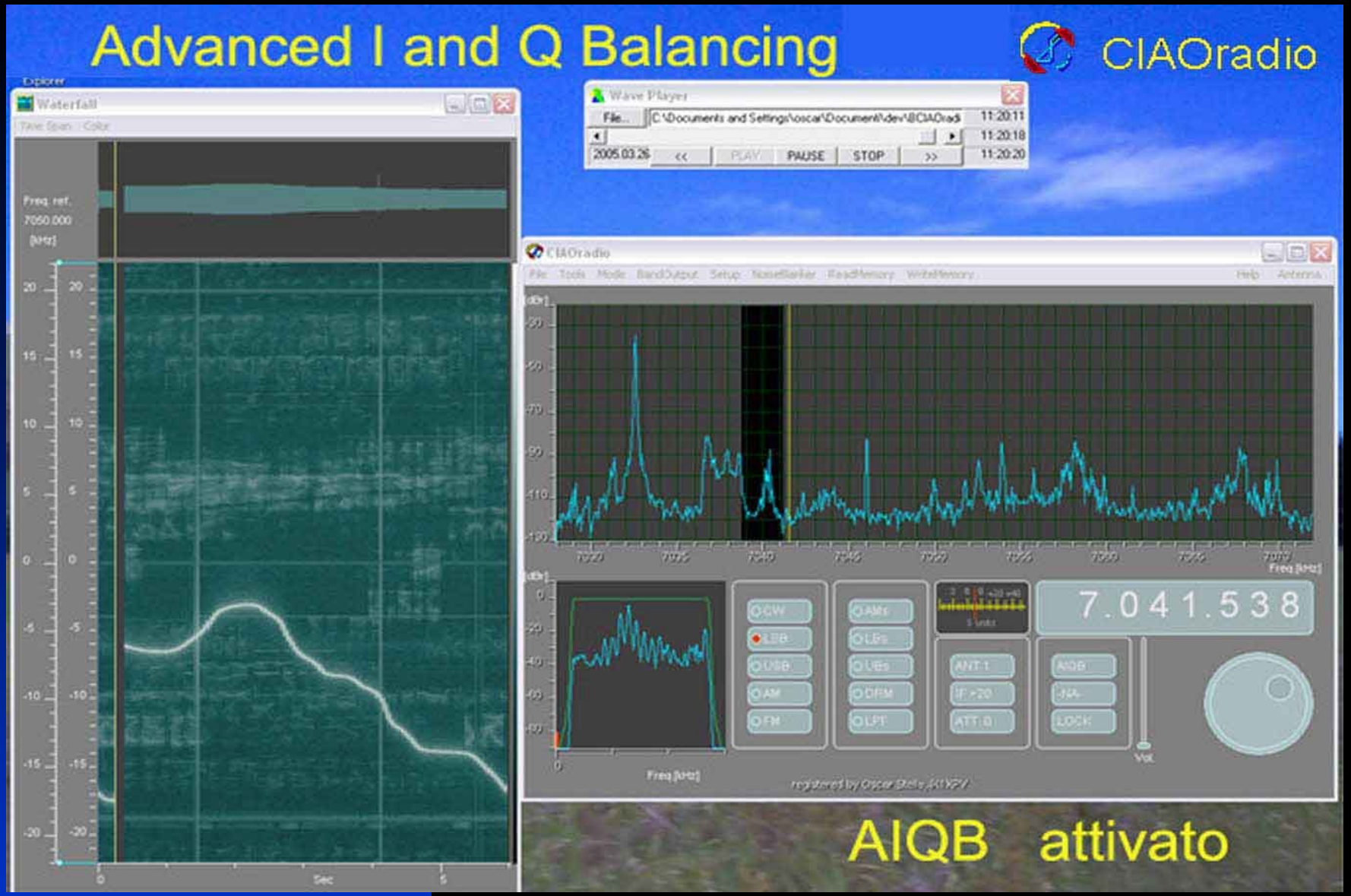
Filtering shape easily changed by mouse



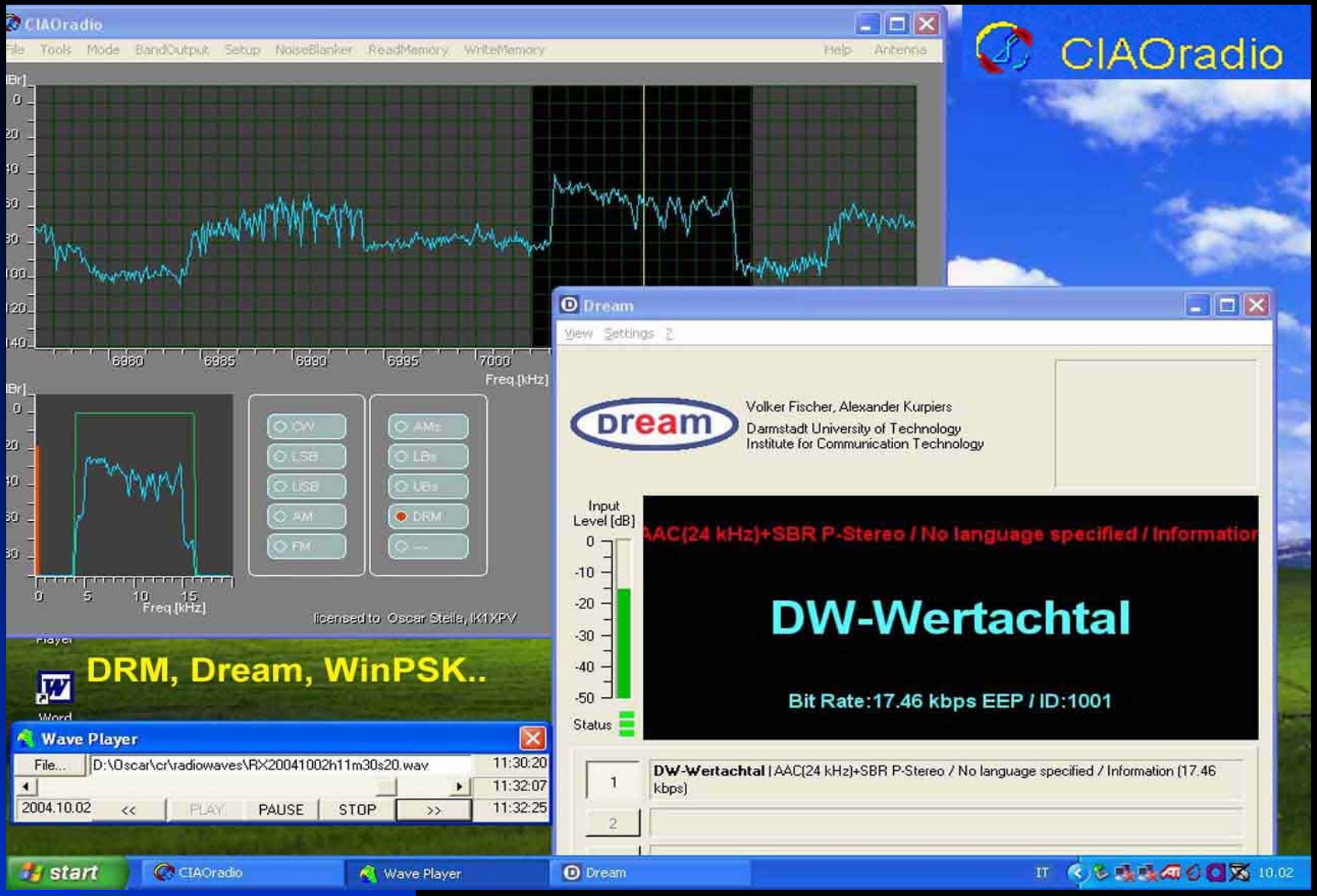
Antenna comparison



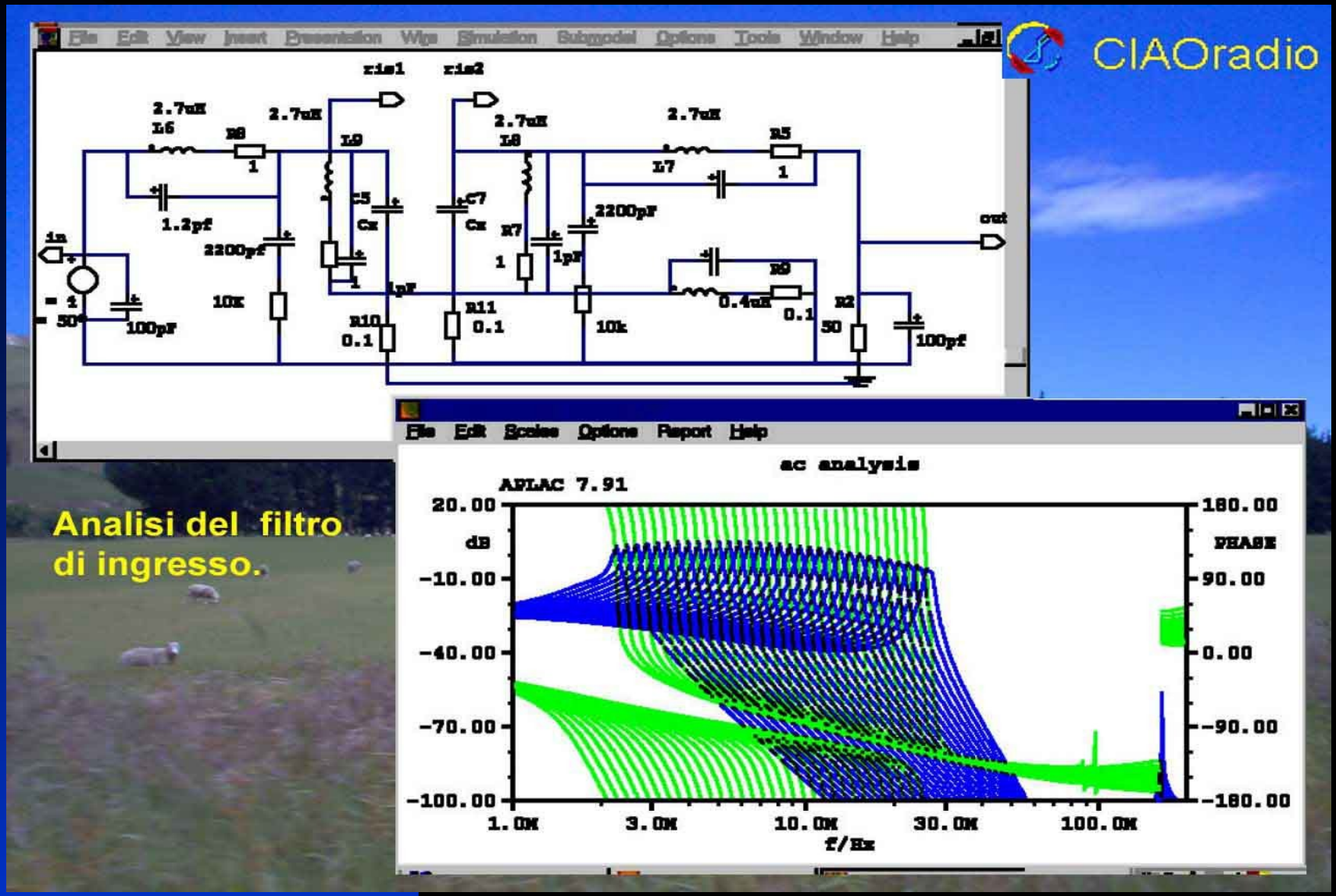
Advanced Automatic I-Q Balancing



Multimode Demodulation

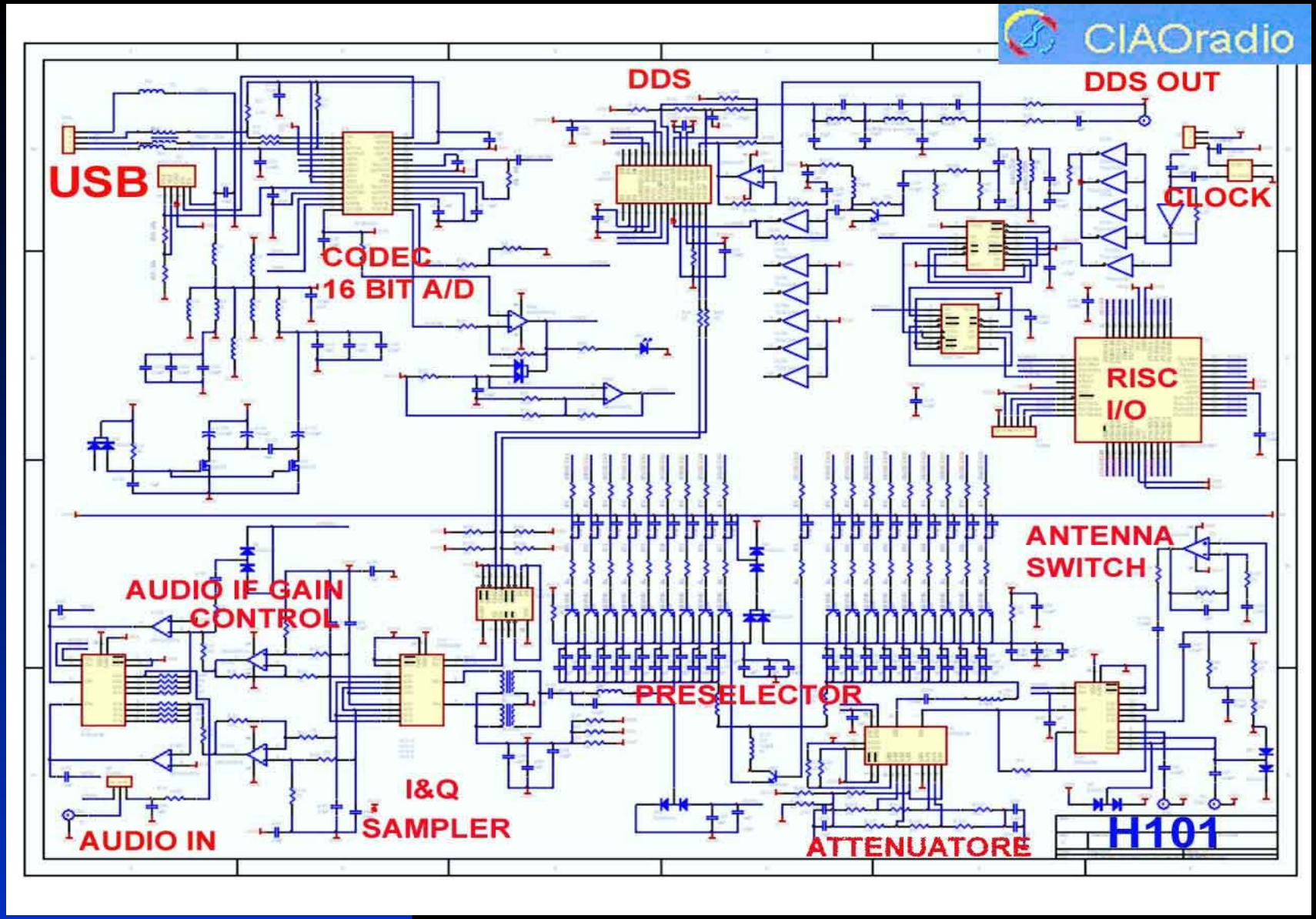


Preselector Design



Analisi del filtro di ingresso.

Drawing


CIAOradio
DDS
DDS OUT
USB
CLOCK
CODEC
16 BIT A/D
RISC
I/O
ANTENNA
SWITCH
AUDIO IF GAIN
CONTROL
PRESELECTOR
I&Q
SAMPLER
AUDIO IN
ATTENUATORE
H101