

Portable QO-100 Software Defined Ground Station

Sunday, 13 December 2020 16:14 (4 minutes)

I would like to talk about my ongoing project “Portable QO-100 Software Defined Ground Station” which is being documented in “<https://github.com/barisdinc/QO100-Partable>”

The main idea is :

- As cheap as possible
- As small as possible
- As open as possible
- PORTABLE

Based on Arduino Nano uSDX as SDR TRX as IF transceiver at 50MHz, it has dual receivers to have lock to beacons capability for frequency stability. Transverter and power amplifier stages are all based on open hardware designs.

The aim of the project is;

- to design a “GEO satellite base station” in a collaborative environment
- learn SDR TRX basics and maths behind it
- a portable station that can be used in EMERGENCY conditions

During the talk and/or presentation I would like to talk about the basic design concepts and design decisions of the system. Also I would like to invite everybody to contribute to this project with their ideas and workforce.

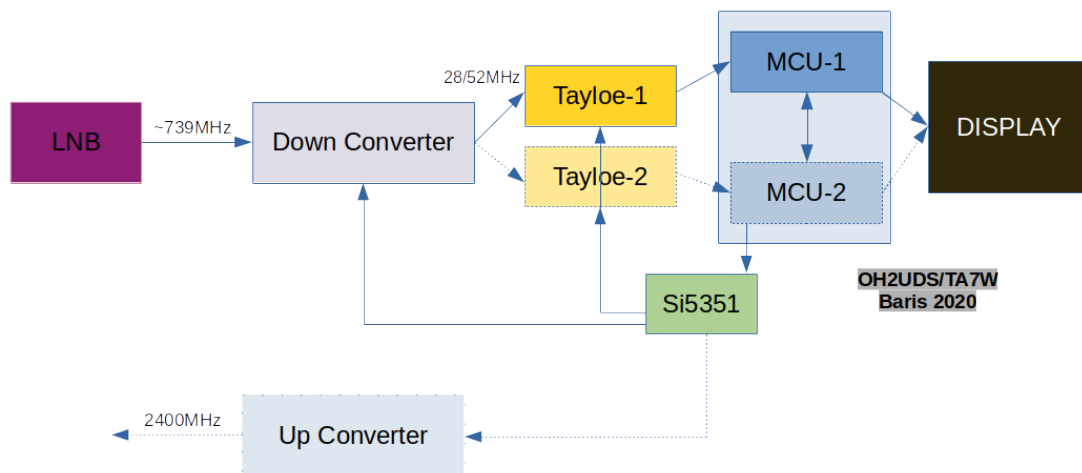


Figure 1: enter image description here

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Session Classification: Room #1