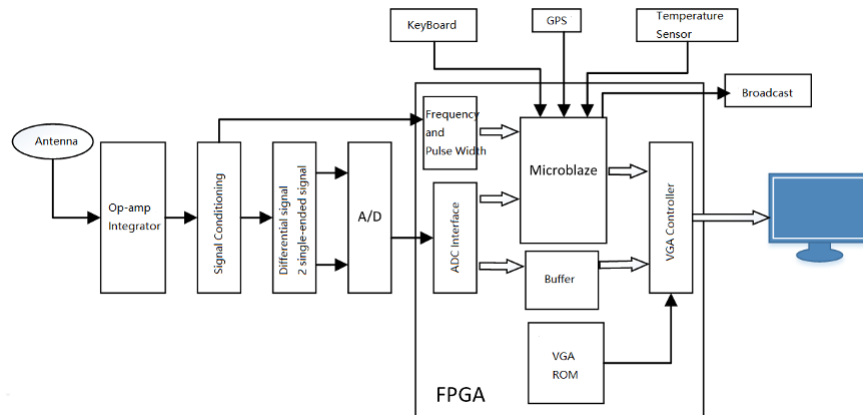


# A new type of Lightning Electric Field Measurement and Transmission System for Board Structure Design

- we designed a lightning electric field measuring instrument based on board and card, which solved the problem of remote processing.
- It mainly consists of antenna, weak signal detection, broadband amplification, high-speed sampling, VGA display, Beidou positioning and other parts.
- The main control uses Arrix-7 series of FPGA, and the Verilog hardware language part is combined with the MicroBlaze software core, which greatly improves the application of the FPGA.



## Results

- By using FPGA autonomous programming, high speed acquisition is realized, and the cost is greatly reduced.
- The system directly drives the VGA display to display the collected curves and lightning electric field information, and adds the warning function.

