



### General Description

- Taking of analog signals from 2 channels. Control of the analog part: some relays, gains and SPI configuration.
- Processing of these signals and filtering to create alarms. System will do some captures per minute, is not a real-time processing and is not necessary to be processing data all the time.
- Signal processing includes:
  - Filter
  - Reconstruction
  - Characterization
  - Alarm generation
- Saving of signals and alarms in RAM memory. It is not necessary to store much information. A 1GB DDR3 memory would be enough.
- Dump of signal information by TCP/IP client using Ethernet connection to electronics, it could be gigabit (optional). The TCP/IP user interface would be pretty straightforward, there wouldn't be much functionality.
- Capture signals autonomously, the electronics would be continuously capturing and processing, looking for alarms.
- Temperature sensors on electronic board.
- Chip programming using micro-USB and JTAG interface.
- SPI Flash for program memory.
- Digital outputs for SCADA systems (fast alarm indicators).
- Possibility of adding SD memory card where to save information on signal captures (optional).