GIGALOG

1024 ch Bio-Signal Stimulator

Gigalog Project Example

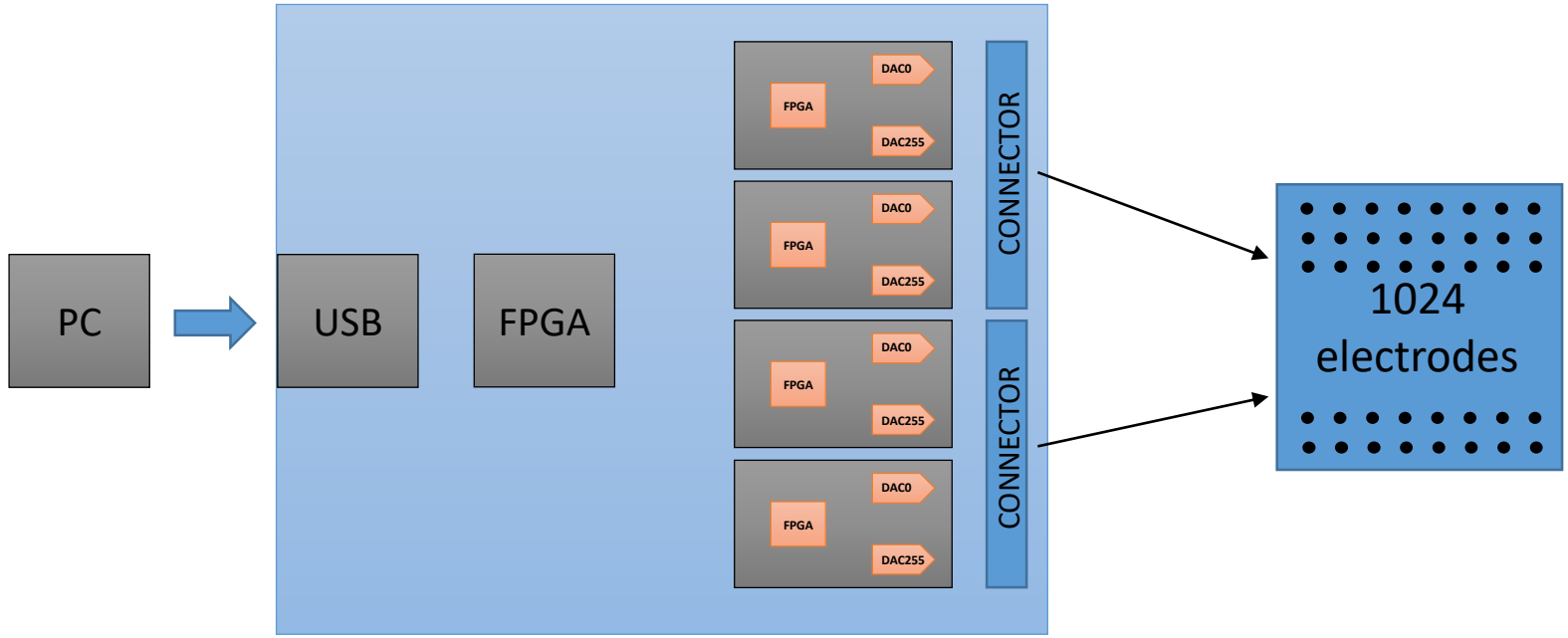
This document contains one of Gigalog projects that was supplied to the final customer. All information in this document provided with customer approval.

For any inquiries, please contact info@gigalogchip.com

Customer Requirements

- Design Board with 1024ch DACs, above 12bit resolution
- Sustained Data Rate of 1KSps/ch
- Noise requirements, below 3LSB
- Ability to connect multiple electrodes for stimulation

Block Diagram - IC



- Simultaneous 1024 channels DACs
- Different electrode structures
- Applicable for bio stimulators

Prototype

- Low Noise 1024 signal generator was built.
- 1024ch DACs@14bit, simultaneous 1KSps for all channels
- USB interconnection to PC
- Many electrodes structures available. Electrodes can be rigid and flex PCBs. Electrodes can easily work in water, included salt water. Electrodes are gold plated.

Summary

- Gigalog has proven experience of providing multichannel bio signal electronics.
- Huge Experience with ultralow Noise designs. World leaders in low noise analog design.
- World Experts in low noise, low leakage, hybrid, mixed-signal PCB design.