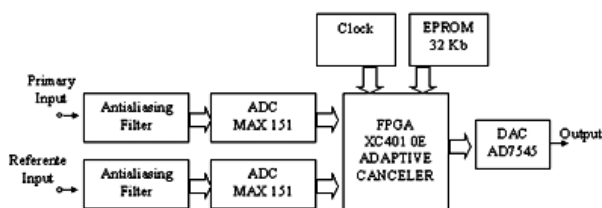


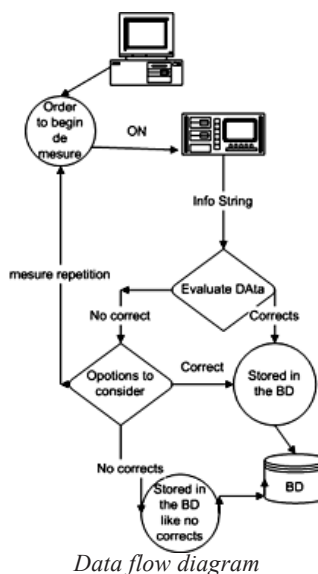
Application by Means of FPGA of Adaptive Canceler 50 Hz Interference in Electrocardiography

The implementation of an adaptable suppressor of single interferences using a FPGA-type (Xilinx) logic programmable device/mechanism is shown in this article. The adaptable suppressor adjusts its parameters automatically to eliminate noise. This ability allows the suppressor to adapt to the changes in the characteristics of the signal. The use of this adaptable suppressor to filter the interferences caused by the power line is shown.



Adaptive Canceler diagram

Automation of Quality Control of Fibre Optics Cable Manufacturing



Data flow diagram

The presented application automates the measurements on a fibre optics cable production line. The proposed solution allows us to perform real time quality control of the manufactured product where an automation of the production process is necessary. To do that, a series of optical measurement instruments OTDR (Optical time domain reflectometer, Anritsu 910A y 9060A,

TD2000) connected to a computer through a GPIB (general Purpose Interface Bus) control card, have been programmed and controlled. The programming language used for this development is Microsoft Visual FoxPro 6.0 and an ActiveX of National Instruments has been applied for the GPIB control card.

SARTI

SARTI

News

- On 21st of May, a agreement between National Instruments and Technical University of Catalonia (UPC) was signed by which National Instruments agrees to equip the training classroom of CTVG with appropriate hardware and software, equipment in their product range and elements connected to computer controlled instrumentation. In return UPC, through Technology Innovation network SARTI (Remote Acquisition Systems and Data Processing Systems) has agreed to give support on specialized training using National Instruments' programs and equipment, to companies, institutions and people that apply. At present, the training classroom is up and running and together with National Instruments we are planning the



Training classroom

inauguration which we hope you can attend.

- The SARTI group, as Tecnoterra associated unit to the Scientific Research Council (CSIC) and Dr. Francesc Sarda of the Marine Sciences Institute (ICM) on 30th of November 2002 organized a conference

on new technologies in the fishing sector, in conference room at Vilanova i la Geltru Technical University.

- The SARTI group which is also part of Natural Risks Network (XT2001-00043), held its first meeting on 20th March 2002 in Heures Palace (Vall d'Hebron campus of UB).

- On 22nd July 2002, the SARTI group received the certificate IT-003/2002 of <<Innovation and business development center>> (CIDEM), for the implementation of a quality management System in agreement with other Technological Innovation Centers

- IT Network, based on ISO 9001 standards and EFQM Models.