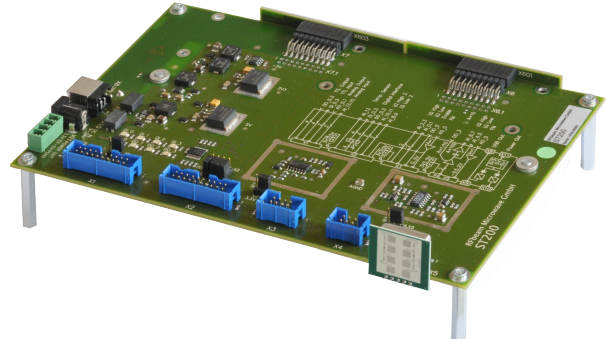


**Features**

- Supports Doppler, FMCW, FSK, Monopulse
- USB Interface to Host Computer
- Onboard Low Noise Power Supplies
- Connectors for Different Radar Devices
- Amplifiers for Native Doppler Transceivers
- High Performance 16Bit Data Processing
- 250kSamples/s ADC and DAC
- Compact and Rugged Construction
- Powerful Signal Explorer PC Software
- NI LabVIEW ® DAQmx USB Interface



**Applications**

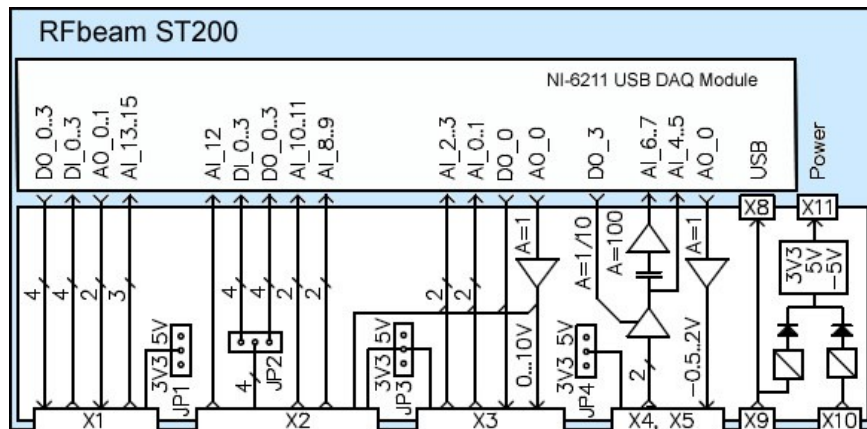
- Evaluation of Advanced Shortrange Radar Applications
- Development of Own Data Processing Algorithms
- Signal Analysis and Logging
- Learning and Exploring Radar Basics

**Description**

ST200 is a 16Bit data acquisition and processing system with a total 250k/s sampling rate. It contains all hardware necessary for acquiring Radar signals of RFbeam Transceivers. ST200 contains a motherboard with power supply, amplifiers and I/O connectors. Data acquisition is performed by a NI-USB-6211 16Bit

multifunction DAQ module from National Instruments mounted on the backside. The easy to handle RFbeam Signal Explorer software features many basic Radar functions including an exciting FSK (Frequency Shift Keying) operation mode for high resolution distance measurements of moving objects.

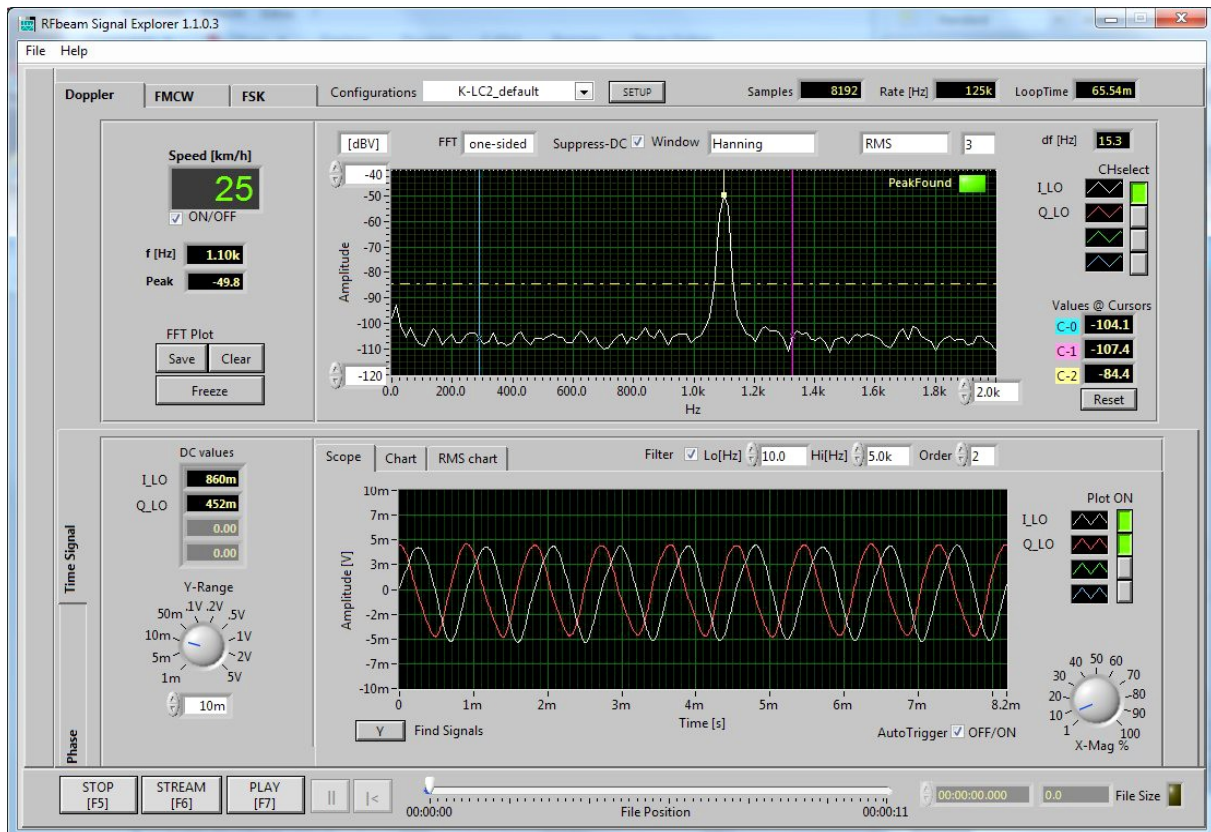
**ST200 Block Diagram**



- Radar Connectors:  
 X1: General purpose I/O  
 X2: Mixed I/O  
 X3: 4 Channel An. Inputs  
 X4: 2 Channel An. Inputs  
 X5: 2 Channel An. Inputs
- Computer Interface:  
 X9: USB PC Port
- Power:  
 X10: Optional DC In  
 X11: Low Noise DC Out

## Signal Explorer Software

**Connect an RFbeam transceiver to ST200, start RFbeam Signal Explorer software and GO!**  
This software allows easy and intuitive exploring of basic shortrange Radar techniques.



## Features

- General Features
  - Support of all RFbeam transceivers
  - Individual predefined and customer defined configuration settings
- Doppler Mode
  - Time domain and FFT graphs
  - Scope and chart readouts
  - Phase (angle) charts for I/Q and monopulse radar transceivers
- FMCW Mode
  - Multiple parallel graphical readouts of analog inputs and VCO output
  - Extensive Individual Settings
  - VCO linearization tool
- FSK Mode
  - Distance measurements even with lowest cost single channel transceivers

## Ordering Information

Part #: RFbeam ST200 Evaluation Kit.

Includes Hardware, Signal Explorer software, K-MC1, K-LC1a and K-LC2 transceivers, optional power supply.

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