

IF TO BASE BAND MODULE

SPECIFICATIONS

FPGA

- Virtex-II FPGA (XC2V3000 or higher) featuring 3 million gates,
- Speed Grade 6
- Virtex-II Pro FPGA (XC2VP7 or higher) Speed Grade 6 with embedded PowerPC

A/D AND D/A CONVERTERS ON BOARD

- Dual 210 MSPS 12-bit A/D converter connected to Virtex-II FPGA SNR>62 dB @ 70 MHz input
- SINAD>62 dB @ 70 MHz input
- ENOB> 10.2 @ 70 MHz input
- Dual 160 MSPS 12-bit D/A converter (with interpolation filters) connected to Virtex-II FPGA
- SFDR>74 dBc @ 25 MHz output
- SNR>74 dB @ 25 MHz output
- 67.5 MHz reconstruction passband @ 160 MSPS update rate
- High analog signal bandwidth of 450 MHz input and 200 Mhz output

HOST INTERFACE

- Host access via 32-bit, 33 MHz PCI rev. 2.2 compliant interface

MEMORY

- 256 MBytes of DDR SDRAM @ 200 MHz
- 16 MB of flash Memory for powerPC code storage

OTHERS

- 8 RocketIO high speed serial transceivers
- 30 bits or more digital IO USB, SDRAM controller
- Flash PROM for storage of FPGA configuration
- Open ended cables with appropriate connectors for Rocket IO and digital IO

SOFTWARE

- API software for the PCI Bus interface for Windows 2000/XP and Linux User guide containing complete FPGA interconnections on board and examples for configuration and user programmability of the two FPGAs.

DESCRIPTION

IF to Base Band Module is a general purpose SDR (Software Defined Radio) built using multi million gate FPGA's. VIRTEX-II FPGA is provided for user logic building.

The board has two channels of A/D and D/A having Bandwidth of 450MHz and 200MHz respectively.

FEATURES

- FPGA Based Design
- High Speed I/O
- 12-bit Resolution A/D and D/A
- Rugged and Reliable

APPLICATIONS

- Digital Down Conversion
- Digital Up Conversion
- Base band processing system
- High speed data Acquisition systems

