Control Software

Introduction

Control machine is a 3GHz dual-core PC. Interface to the hardware provided by two Adlink PCI cards PCI7200 and PC9111HR, also USB->JTAG interface for Xilinx programming. Because this was well supported by Windows XP, this was used for first control software. One of the cards provides analog input/output and controls the IF section, the other controls the registers of the FPGA cards, setting values and reading out others.

There is also code to set the AD9858 chip so that the clock is exactly 1024MHz. Newer version of the clock card is also capable of 2048 MHz clock. Clock chip Interface is the parallel port.

Although Windows XP is presently used for control, use of Linux has also been demonstrated (openSuSE 10.3), which can also talk to Adlink PCI cards, and by libusb also to Xilinx interface. The syntax of the control language is similar to that of the vlba terminal, at least for the setting of frequency and bandwidth.Field system code is at present adapted from Wettzell station code.

Separate software for PFB configuration with its own control syntax.