LabActor

LabActor main control pannel

[abc] **Monitor**

    List of active measurement modules

[TF] **Start monitor**

    Start measurement

[TF] **Stop monitor**

    Stop measurement

[TF] **View XY Plot**

    View Monitor data file

[TF] **Read cfg**

    Read application configuration from file

[TF] **Write cfg**

    Write application configuration to file

[TF] **Monitor configuration**

    Open Monitor configuration

TF **Exit**

Exit application

TF **Clear log**

Clear error log

TF **Monitor Running**

Measurement state
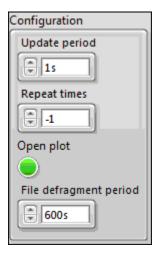
Monitor File

Latest Monitor data file

abc **Error log**

Monitor

Monitor configuration

Configuration

Monitor configuration

DBL **Update period**

Request data collection this often

I32 **Repeat times**

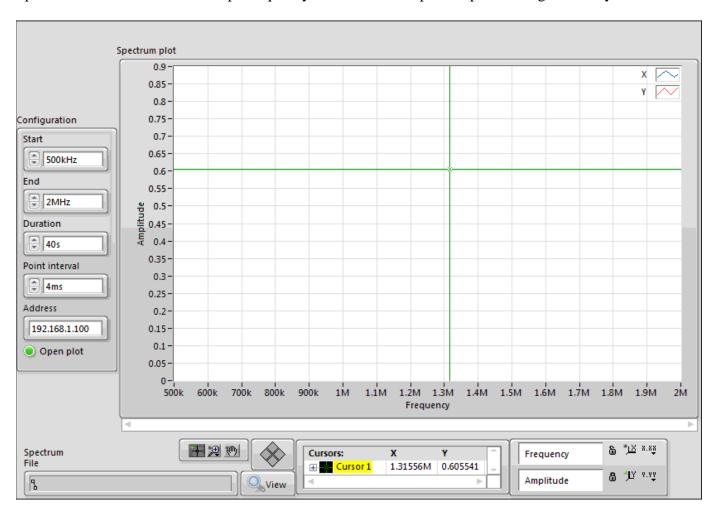Complete this many measurements then stop (or keep going if <0)

TF **Open plot**

Open new Monitor data plot on start

[DBL] **File defragment period**

Defragment Monitor data file this often when running

Spectrum Recorder

Spectrum Recorder module sweeps frequency and records complex response using Red Pitaya

[STR] **Configuration**

Spectrum recorder configuration

[DBL] **Start**

Spectrum starting frequency

DBL **End**

Spectrum ending frequency

DBL **Duration**

Spectrum duration

DBL **Point interval**

Interval between frequency points

abc **Address**

Network address of Red Pitaya

TF **Open plot**

Open new spectrum plot window at the start of measurements

TF **Regions of interest**

DBL **Region centers**

DBL **Numeric**

DBL **Regions width**

TF **View XY Plot**
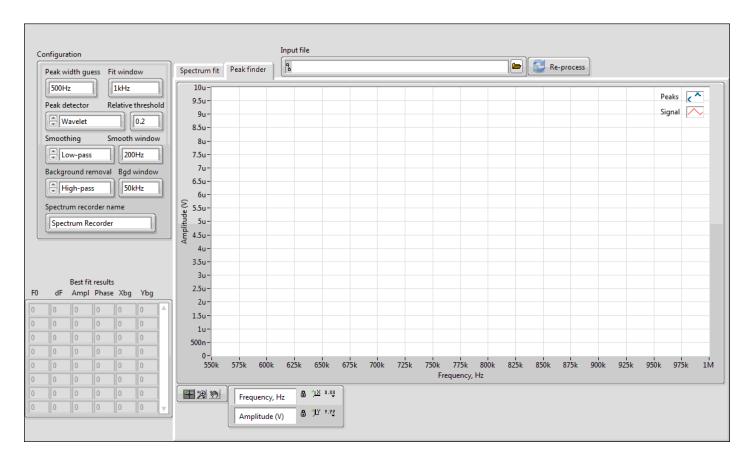
View latest spectrum file

Spectrum plot

Latest spectrum

Spectrum File

Latest spectrum file

Line Detector

Line Detector module finds amplitude peaks in spectrum file and fits complex Lorentzian around peaks

⬚ Input file

Spectrum file to process (auto-updates when monitor is running)

⬚ Configuration

Line Detector configuration

DBL⯈ Peak width guess

Guess width for peak finder

◀▶⯈ Background removal

Background removal type for peak finder

◀▶⯈ Smoothing

Smoothing type for peak finder

DBL⯈ Smooth window

Smoothing amount for peak finder

DBL⯈ Relative threshold

Smallest peak magnitude relative to spectrum maximum

▦ Peak detector

Peak finder type

▦ Bgd window

Background removal width for peak finder

▦ Spectrum recorder name

Name of the spectrum recorder module to watch

▦ Fit window

Width of complex Lorentzian fit window around the peak

▦ Re-process

Re-process spectrum selected in the Input file window

▦ Spectrum plot

Spectrum data with complex Lorentzian fit

▦ Peak Plot

Filtered and smoothed magnitude with peaks found

▦ Best fit results

Latest complex Lorentzian fit results

▦ Numeric