ECE 451

Automated Microwave Measurements Laboratory

LabVIEW tutorial 2

Reading the data

One of the advantages of LabVIEW's LVM format is the ease with which we can retrieve saved data. As shown in Figure 1, we simply insert an Express VI named _Read from Measurement File_ and _Error Handling_ and optionally display the path and filename from which the user opted to read the data.
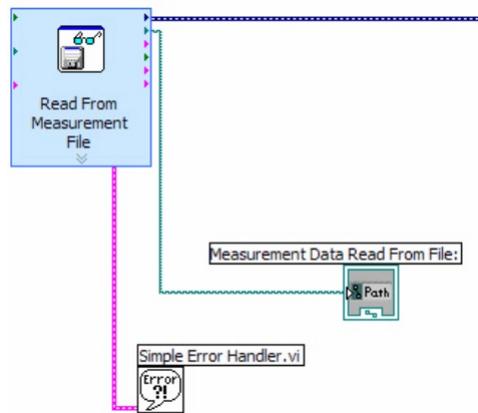

Figure 1: Reading data from LVM file.

Plotting the Read Data

Plotting the read data is done very much the same fashion as in Tutorial 1 – we simply break down the set of signals into individual arrays, using _Split Signals_ (found in _Express>Signal Manipulation_), and then plot two graphs using standard _Build XY Graph Express_ VI, as depicted in Figure 2.
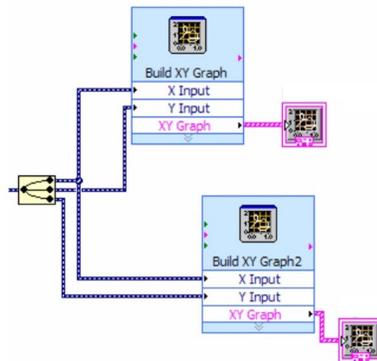

Figure 2: Split and Plot data.

Keep in mind that signals are extracted from the _Split Signals_ in the same order that they were merged together. You could use this information to extract the right signal you need to perform error corrections in LabVIEW with some simple arithmetic calculations.