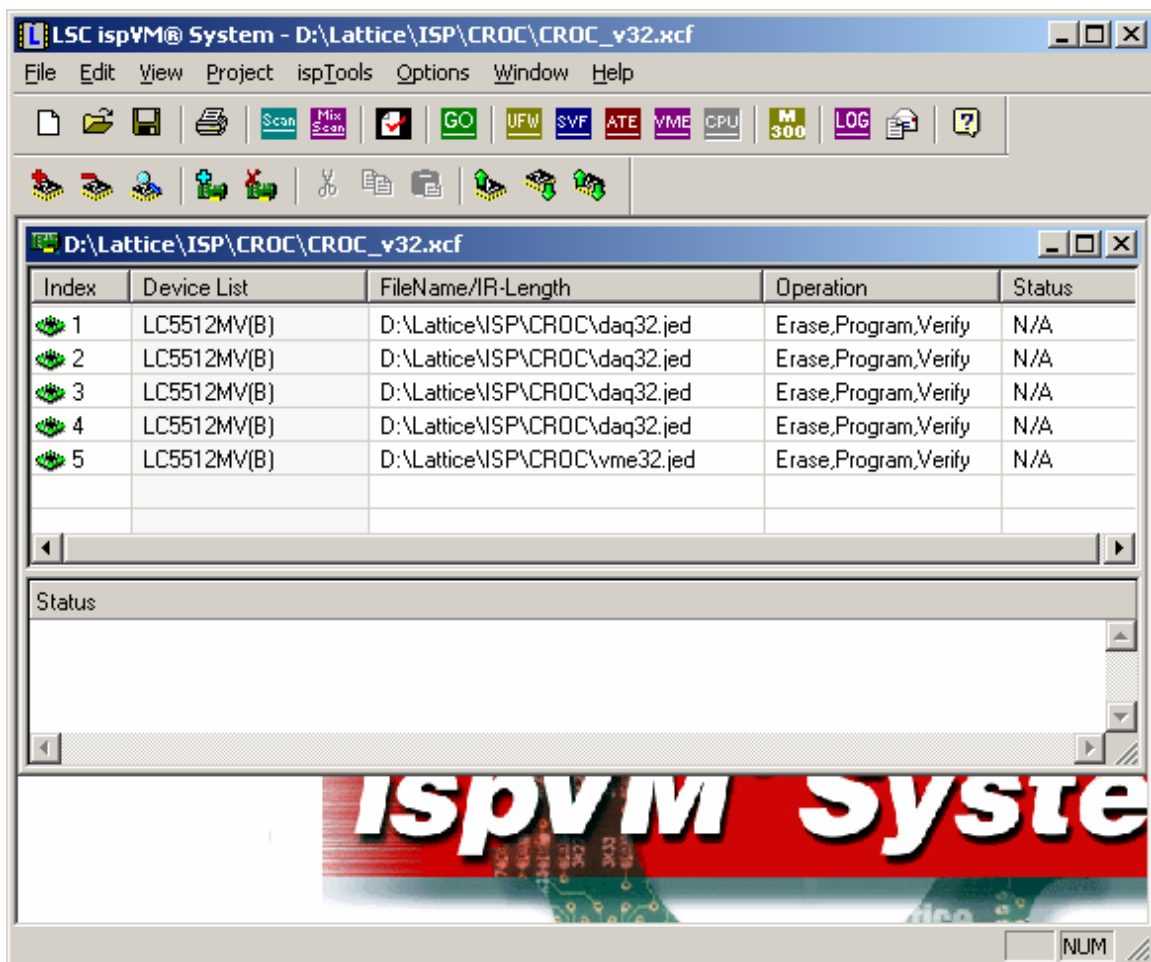# Instructions for updating CROC/CRIM firmware

1. Obtain JEDEC (*.jed) and configuration (*.xcf) files for Lattice ISP programming cable. Two JEDEC files are needed for full CROC firmware update, and three JEDEC files are needed for full CRIM update.

2. Place all files in a convenient location (e.g. C:\Lattice\ISP\CROC or C:\Lattice\ISP\CRIM).

3. With the VME crate power **OFF** insert the module you want to program and connect ISP programming cable. **Important:** Observe pin 1 on the cable connector and the VME board. Turn **ON** the VME crate.

4. Start Lattice ispVM System software. Go to the **File** menu and click on **Open** command. Select CROC or CRIM configuration file from the location you have selected in step 2.

5. You will see the following picture (CROC configuration shown):

6. Double click on each line in Filename/IR-Length column. You will see the following Device Information menu:

7. Using **Browse** button locate JEDEC files you saved in step 2. Select the same file name as in original configuration. Click OK. **Important:** Failure to do this properly will result in not working module. Repeat for each line in the configuration file.

8. Using **Save As** command from the **File** menu, save new configuration file with a different name. Keep original configuration file for a reference.

9. Click **GO** button in the tool bar. The programming process will start. After it finished verify that all lines in the Status column have green light (**PASS**).

10. Turn **OFF** the VME crate and disconnect ISP programming cable. **Important:** Do not disconnect programming cable while the VME module is powered.