

## Altera Max+plus II Waveform Editor Instruction

### Selecting Signals

1. **Max+plus II** • **Waveform Editor**
2. **Node** • **Enter Node from SNF ...** (a small window pop up)
3. Press "**List**" button to list all the inputs and outputs
4. Press "**=**" located at the center of window
5. Press "**Ok**", you see all the inputs and outputs on Waveform Editor

### Grouping Signals (Optional)

1. Keep pressing shift key, click signals to be grouped (e.g. A17, A16, A15)
2. **Node** • **Enter Group**
3. Choose a group value format (BIN, DEC, OCT, or HEX)
4. Press "**Ok**" (e.g. A17, A16, and A15 should be grouped and displayed as one signal such as A[17..15])

### Assign signal values

1. Select an input signal (you can assign values only on input signals)
2. Choose a time period (e.g. between 100ns and 200ns)
3. Click on the time period by left button of mouse
4. Keep clicking mouse, sweep through the time period horizontally (Region between 100ns and 200 ns should be marked on)
5. If the selected signal is **NOT** grouped
  - a. At the left side of the screen, there are buttons, '**0**', '**1**', '**X**' (**Don't care**), '**Z**' (**High Impedance**), press '**0**' for '**Low**' signal and '**1**' for '**High**' signal (e.g. if you press '**1**', you will see the signal between 100ns and 200ns is changed to high.)
6. If the selected signals are grouped
  - a. **Edit** • **Insert** • **Group Value**
  - b. Assign the number (e.g. if you wish to have A17=1, A16=1, and A15=1, enter '**7**' in the box)
  - c. Press '**Ok**'
7. Assign appropriate values for **all the input signals** in order to make better simulation