How to add .mem file to Vivado

In Vivado, add the .mem file as a source. The file will show up as a Memory File.

Be sure that the name in Vivado is the same as the name in the XPM macro in VHDL.

Type the values in hex. Each value has its own line. Include no other formatting.

Load the .mem file to Vivado BEFORE the implementation step. After implementation, select the block ram and go to properties. You will see that the block ram is full of data. This is the data from the .mem file.

