

1 Download ProNoC Source Code

In order to download ProNoC source code open the *terminal* and run:

```
svn co http://opencores.org/ocsvn/an-fpga-implementation-of-low-latency-  
-noc-based-mpsoc/an-fpga-implementation-of-low-latency-noc-based-  
mpsoc/trunk/
```

2 Install Perl modules

Install GTK library

```
sudo apt-get install build-essential  
sudo apt-get install libgtk2.0-dev libglib2.0-dev  
sudo apt-get install libpango1.0-dev
```

Now run cpan

```
sudo cpan
```

If cpan needs any configuration setting answer them 'yes'.

Then install the following in order

```
install ExtUtils::Depends  
install ExtUtils::PkgConfig  
install Glib  
install Pango  
install Gtk2
```

Other required modules:

```
install String::Similarity
```

Exit cpan

```
exit
```

3 Download aeMB & lm32 compilers

Download the aeMB compiler at

```
http://gnuradio.org/tools/mb-gcc-4.1.1.gr2.i386.tar.gz
```

Download the lm32 compiler at

```
http://www.ohwr.org/attachments/1301/gcc-4.5.3-lm32.tar.xz
```

Unzip the files and copy them in `mpsoc_work/toolchain` directory:

```
tar xf gcc-4.5.3-lm32.tar.xz  
mv lm32 mpsoc_work/toolchain/  
tar xvzf mb-gcc-4.1.1.gr2.i386.tar.gz  
mv microblaze mpsoc_work/toolchain/aemb
```

Add *ihex2mif* to your toolchain:

```
cp -R mpsoc/src_c/ihex2mif/ mpsoc_work/toolchain/  
cd mpsoc_work/toolchain/ihex2mif  
make
```

Add mpsoc_work path to the PATH variable in .bashrc file:

```
gedit ~/.bashrc
```

Add PRONOC_WORK variable to .bashrc file and save the file:

```
export PRONOC_WORK={path_to_mpsoc_work_directory}  
# e.g export PRONOC_WORK=/home/alireza/Mywork/mpsoc_work
```

The 32 bit library is required on 64 bit system. If it is not installed run:

```
sudo apt-get install lib32z1
```

4 Run gui application

```
cd mpsoc/perl_gui  
./ProNoC.pl
```