Subject: xmos builder
Posted by brown on Fri, 10 Jul 2015 10:52:46 GMT
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Hi, I have a plan to migrate my embedded sw project to upp infrastructure. (Iam using upp on desktop several years ago.)
So I have a plan to write some new class(es) to uppsrc\ide\Builders.

Is anyone else interesting on this task/project?

Short introduction of the projects goals/ideas:
To be able to compile an xmos project some rational way.

xmos is company, xcore is a oommunity for this multithread microcontrollers. This one is a little bit differs from the others.
The funny thing on this architecture is the xmos cpu have its hardware implementations for typical multithread problems like:
-they have own c like language namely xc, which contains multithread additions. CPU have thread specific registers and instructions.
-have atomic send message and syncron between threads and outside of the controller (channels).
-have resources: channel, clock, sync, thread, io. Thease are managed by mostly on the hardware.
-have kernel and user mode. (XC compiler creates all of kernel codes, like allocation&lock, thread start/fork/join etc.
-they have a modified eclipse ide & CDT. But it is coded in java, and it is a)slow b)dislike how it works.

There are a gcc like xc language compiler xcc and xmake, xsim and similar binary tools... So I hope this task will be not so difficult. The actual GccBuilder fails on calling of these tools right now, because these are a little bit different. There are some extra or changed arguments, it requires some enviroment variables, and I think there is some memory size issues too, etc...
I spent one day to this problem in the past week, and I decided to not use the actual upp ide, at this moment. Some improvement needed.

First of all I would like to know, if someone else is interested on this area...
Thanks.
B.

Subject: Re: xmos builder
Posted by mirek on Fri, 10 Jul 2015 13:39:51 GMT
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Thanks.
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Sounds good and relatively easy to do for me...

Mirek