

Re: Making Ethernet work on DB1100 (MIPS) ie. "Product Ethernet"

Source:

<http://www.tech-archive.net/Archive/WindowsCE/microsoft.public.windowsce.platbuilder/2007-03/msg00350.html>

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 - *Date:* Sat, 10 Mar 2007 22:55:11 -0800
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I don't have a copy of the DB1100 BSP handy, I don't know what kind of Ethernet chip it uses, I don't have a copy of your project handy, and I don't have much to go on, so I can only make guesses and suggest how things should work.

You need two things for Ethernet to work:

- Sufficient OS support for Ethernet. This requires `SYSGEN_ETHERNET` and possibly some other components. This will make the control panel applet available, as well as add a TCP/IP stack and general networking support to the operating system image. Some of these are automatically added. For example, setting `SYSGEN_ETHERNET` automatically enable `SYSGEN_TCPIP`. Looking at CE 6.0, if both `SYSGEN_CONNMC` and `SYSGEN_ETHERNET` are set and a driver is loaded, you'll get a system tray icon.
- A driver. This will either be from your BSP (usually hardcoded into your BSP's scripts in the case of a built-in BSP-specific ethernet chip) or from the generally available drivers provided with CE (you add a driver based on the type of Ethernet card you have added to your board).

To get a system tray icon, you need three things:

- A loaded Ethernet driver.
- Ethernet support. (`SYSGEN_ETHERNET`.)
- Network connections UI support (`SYSGEN_CONNMC`.)

A properly written BSP will automatically include the BSP's built-in ethernet driver if the project includes ethernet support. It generally works like this:

- Ethernet driver is a DLL that is always built, or is built as long as necessary OS support is present. Necessary OS support might come in the form of `SYSGEN_DEVICE`, `SYSGEN_FULLCRT`, `SYSGEN_ETHERNET`, or any number of other prerequisites. You would have to look at the `DIRS` file or the `SOURCES` file in the BSP to find out the exact filter (if any). That said, usually the filter is a subset of the filters mentioned below, so this isn't usually a concern.
- Driver DLL is included into your image by your BSP's `platform.bib` file. The DLL is only included if certain variables are set in the environment — again, there is a filtering stage. Typically, the driver will be included into your image if both `BSP_MYETHERNETCARD=1` and `SYSGEN_ETHERNET=1`. Often there are additional filters, but this is specific to the BSP. Platform Builder can help you find out what needs to be set to get your drive