

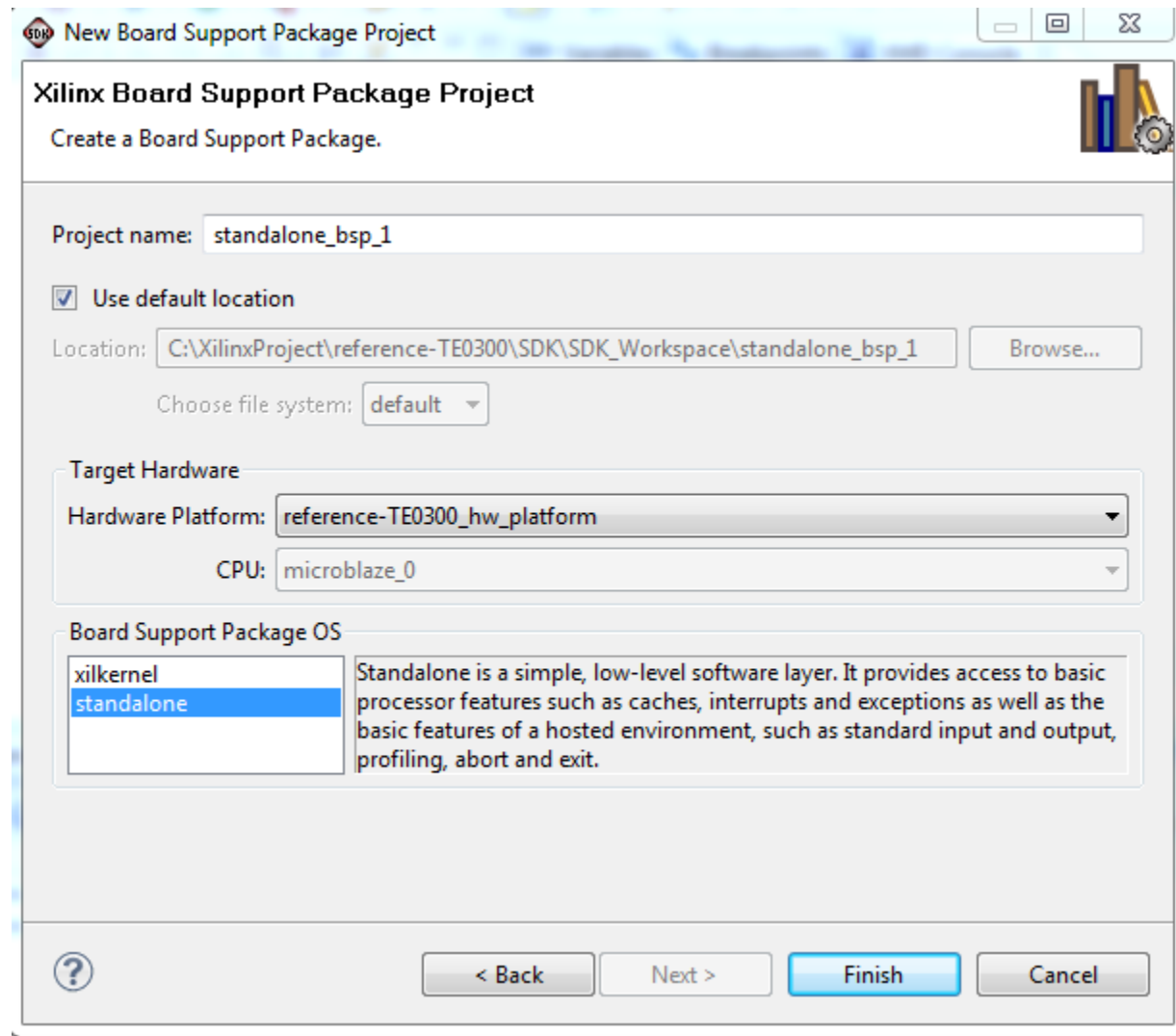
# Create a "Board Support Package Project" "standalone\_bsp\_0"

You should click "File" > "New" > "Project".

A pop up "New Project" will appear.

Click "Xilinx" > "Board Support Package", then next.

A new pop up "New Board Support Package Project" will appear.

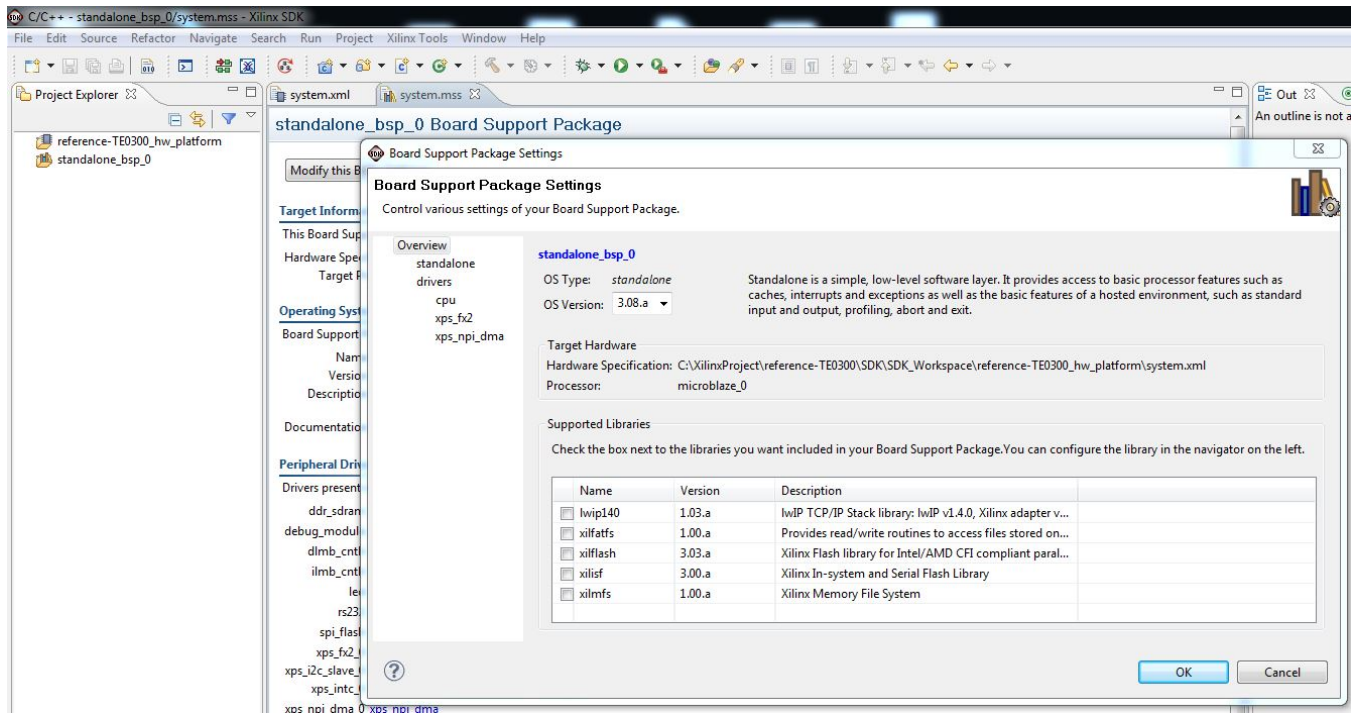


The screenshot shows the 'New Board Support Package Project' dialog box. The title bar reads 'New Board Support Package Project'. The main title is 'Xilinx Board Support Package Project' with the subtitle 'Create a Board Support Package.' Below this, the 'Project name' field contains 'standalone\_bsp\_1'. The 'Use default location' checkbox is checked. The 'Location' field shows 'C:\XilinxProject\reference-TE0300\SDK\SDK\_Workspace\standalone\_bsp\_1' with a 'Browse...' button. The 'Choose file system' dropdown is set to 'default'. Under 'Target Hardware', 'Hardware Platform' is 'reference-TE0300\_hw\_platform' and 'CPU' is 'microblaze\_0'. Under 'Board Support Package OS', 'standalone' is selected in the list, and a description box on the right states: 'Standalone is a simple, low-level software layer. It provides access to basic processor features such as caches, interrupts and exceptions as well as the basic features of a hosted environment, such as standard input and output, profiling, abort and exit.' At the bottom, there are buttons for '< Back', 'Next >', 'Finish' (highlighted in blue), and 'Cancel'.

## New Xilinx Board Support Packages

Select "standalone" for "Board Support Package OS" and "standalone\_bsp\_0" for the "Project name".

A new pop-up will appear "Board Support Package Settings".



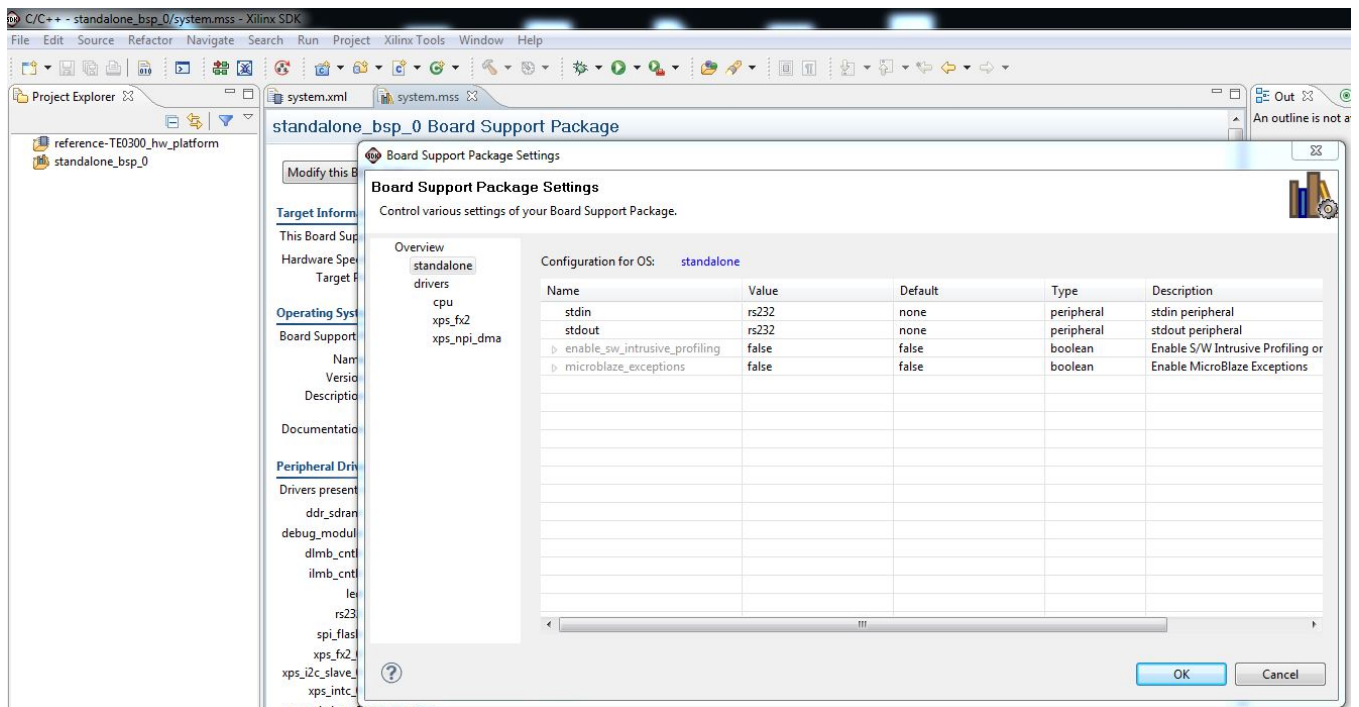
### BSP overview

After this, you should click "standalone" and set "stdin" and "stdout" to "rs232" or "debug\_module":

1. you should select "rs232" if you desire to use a real UART ( and not a simulated UART though JTAG connection);
2. you should select "debug\_module" if you desire that the XMD\_UART works as local UART through the JTAG connection.

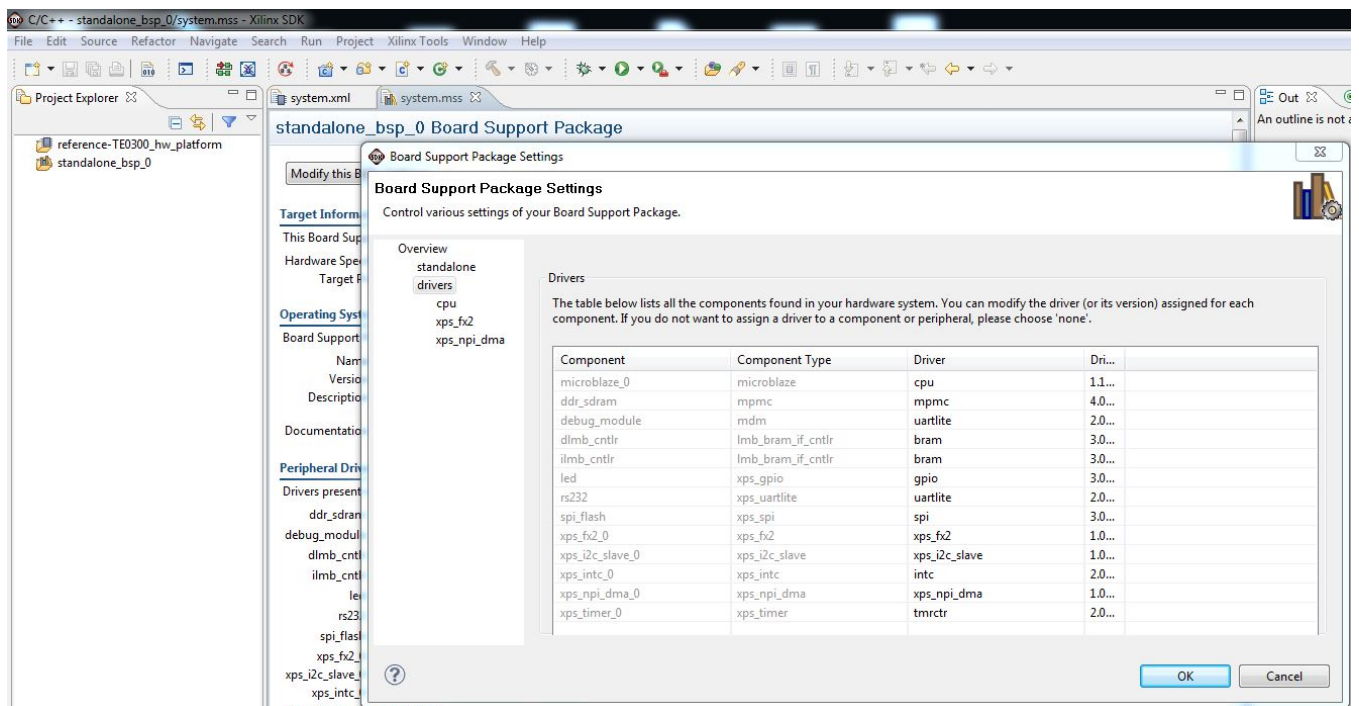


Demo program (running on MicroBlaze) will work even in case the UART port is left unconnected: it is not necessary to use a USB/Uart converter or Uart port on a PC, if you are using XMD UART HDL block.



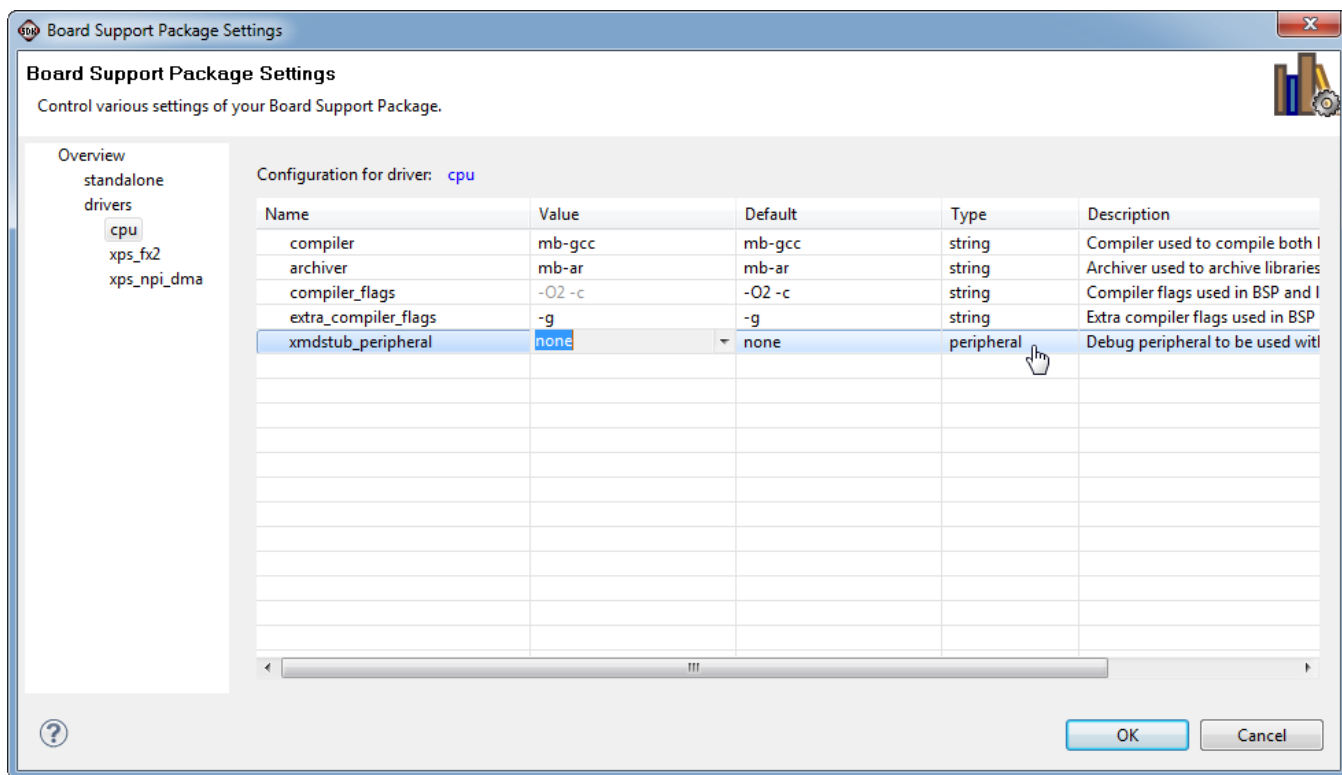
#### BSP rs232 or debug\_module

After this, you should click drivers to verify that all Microblaze components are supported by the driver in the repository "C:\XilinxProject\TE-EDK-IP"; click "OK" and the pop-up should disappear.



#### BSP drivers for Microblaze components

In particular you should also verify that "xmdstub\_peripheral" is assigned to none if you desire to use debug\_module instead of rs232.



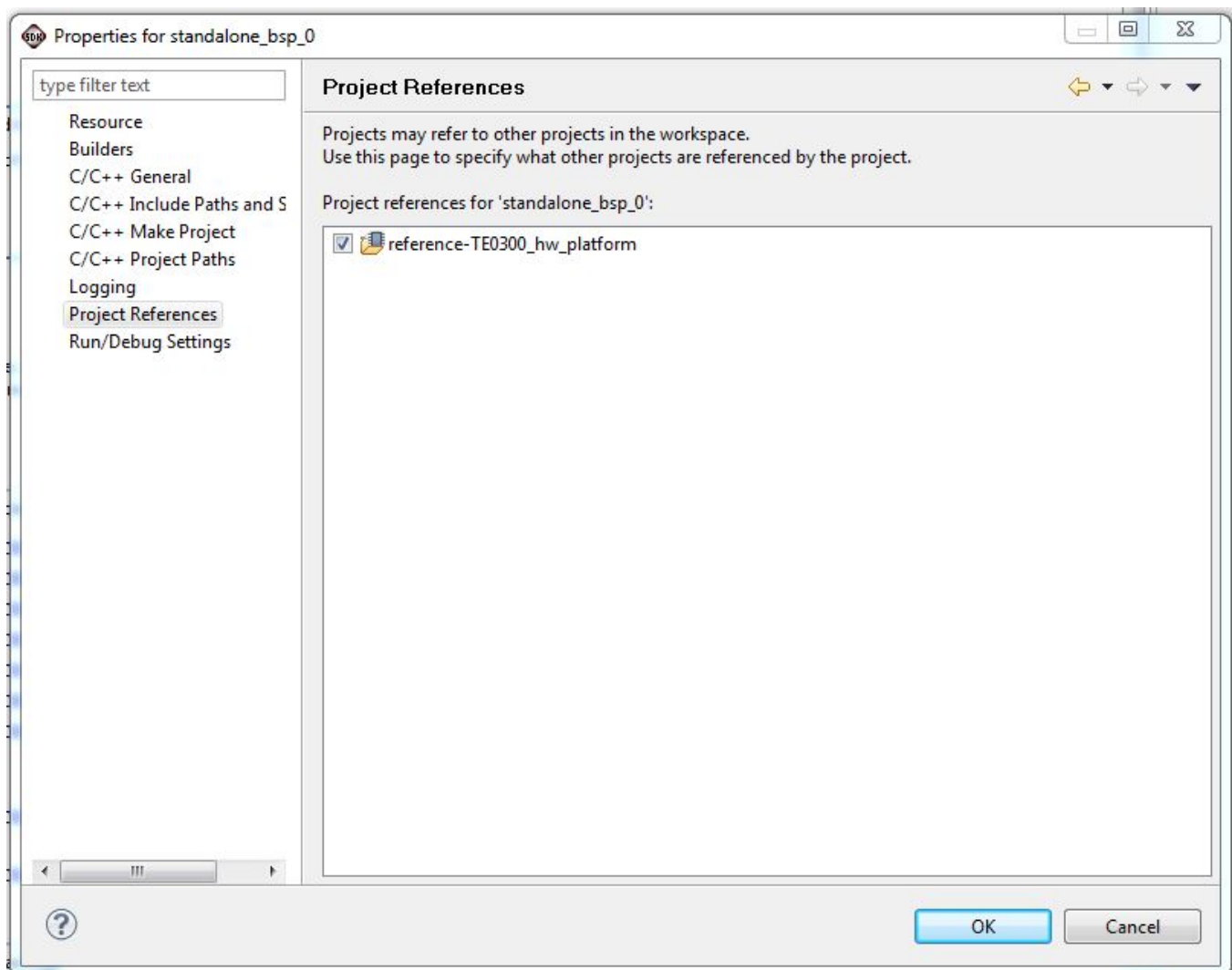
**xmdstub\_peripheral assigned to none**

After this, you have verified that all Microblaze components are supported by a driver, right click the "standalone\_bsp\_0" folder in "Project Explorer".

The pop-up "Properties for standalone\_bsp\_0" should appear.

Click "Project References".

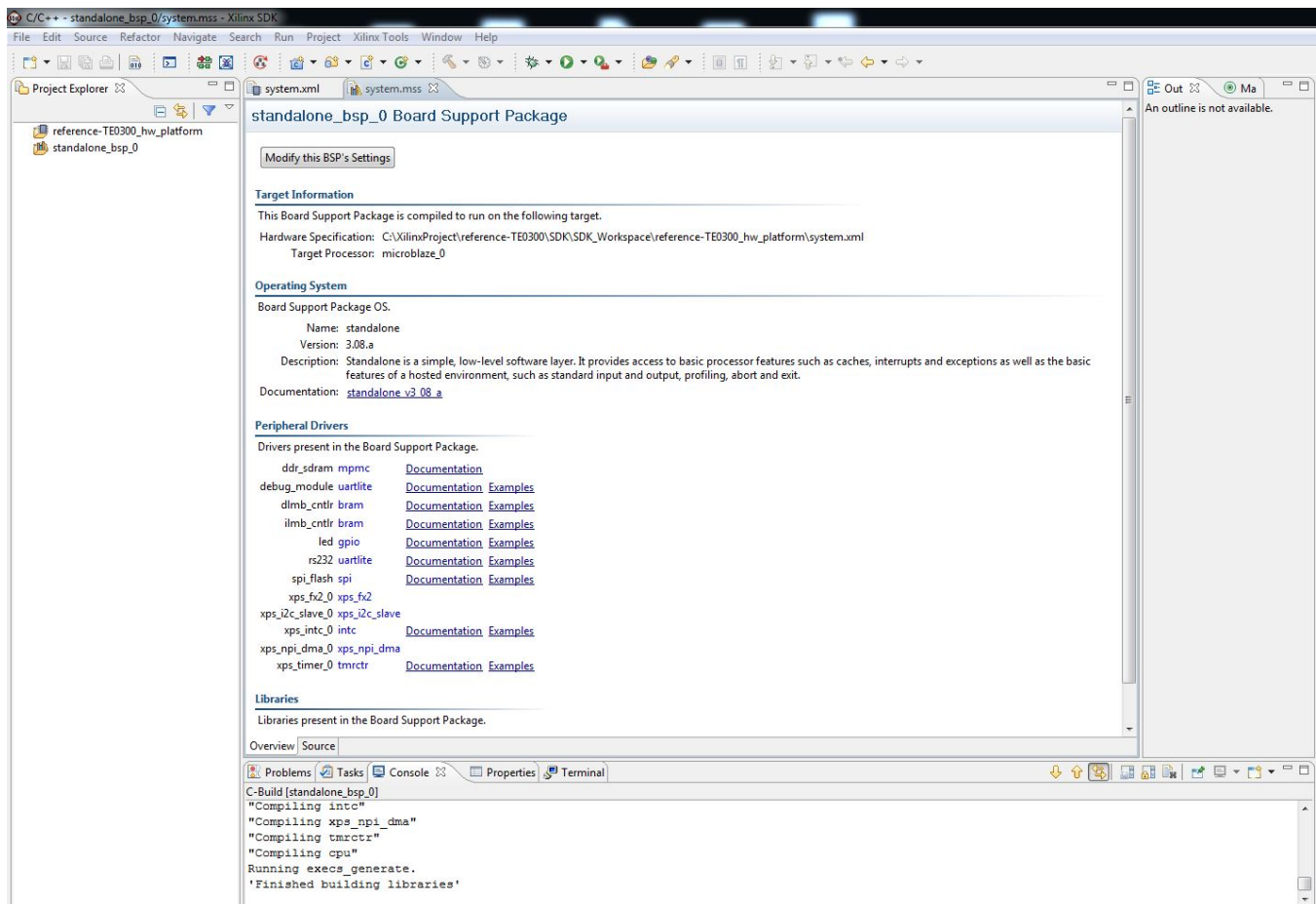
You should verify that "standalone\_bsp\_0" references to "reference-TE0300\_hw\_platform":if is not checked you must check the box.



"standalone\_bsp\_0" Project References

Click "OK";

After this, you should wait until the SDK compile the added files (C-Build [standalone\_bsp\_0]) and a message 'Finished building libraries' appears.



'Finished building libraries' appears