

source.xml Reference#

The IDE uses the source.xml to gather and display information about a BSP.

Here's an example for the Freescale Sandpoint board:

```
<!-- Unless otherwise specified, values/attributes are free-form strings -->
<!-- type is currently either BSP or SourceOnly -->
<sourcePackage type="BSP" id="bsp-freescale-sandpoint">
  <title>Freescale Sandpoint</title>
  <release>1.0.1</release>
  <description>
    This package contains the source and build files for targeting QNX Neutrino on the
    Freescale Sandpoint reference board. This includes support for the MPC750, MPC755,
    MPC7400, MPC7410, MPC7450, MPC7447A, MPC7455, MPC8240, and MPC8245.
  </description>
  <vendor>QNX Software Systems</vendor>
  <qnxTargetVersion>6.3.0SP1</qnxTargetVersion>
  <qnxTargetCPU variant="ppcbe">PowerPC</qnxTargetCPU>
  <!-- type is currently only import, will be extended in the future. -->
  <bsp type="import">
    <import id="sandpoint-flash">images/sandpoint-flash.build</import>
    <import id="sandpoint">src/hardware/startup/boards/sandpoint/build</import>
    <imageCombine iplEnable="true" iplFileName="ipl-sandpoint" iplPadSize="0x2000" finalEnable="true" finalFormat="src"
  </bsp>
</sourcePackage>
```

Element sourcePackage#

<sourcePackage type="package-type" id="package-id">

This is the main element in the setup.xml file. It should occur only once.

| Attribute | Value                                                         |
|-----------|---------------------------------------------------------------|
| type      | One of <b>BSP</b> or <b>SourceOnly</b>                        |
| id        | package id - this is used by the IDE as the projects' prefix. |

Board support packages should have the **BSP** type.

| Child Elements                             |
|--------------------------------------------|
| <title>...</title>                         |
| <release>...</release>                     |
| <description> ... </description>           |
| <vendor> ... </vendor>                     |
| <qnxTargetVersion> ... </qnxTargetVersion> |
| <qnxTargetCPU> ....</qnxTargetCPU>         |
| <bsp> ... </bsp>                           |

Element title#

<title> bsp title </title>

This element specifies the readable package title.

## Element `release`<#>

**<release> *release number* </release>**

This element specifies the package release. BSP packages are released against major versions of the QNX SDP starting at 1.0.0.

## Element `description`<#>

**<description> *long description* </description>**

This element contains the long description of the BSP that is presented to the user by the IDE during import.

## Element `vendor`<#>

**<vendor> *pretty vendor string* </vendor>**

This element specifies the vendor responsible for the package. Official QNX packages have *QNX Software Systems* in this field.

## Element `qnxTargetVersion`<#>

**<qnxTargetVersion> *QNX SDP Version* </qnxTargetVersion>**

This element specifies the version of the QNX Software Development Platform that this BSP targets. BSP targeting QNX SDP 6.4.0 should have **6.4.0** here.

## Element `qnxTargetCPU`<#>

**<qnxTargetCPU variant="variant"> *pretty variant* </qnxTargetCPU>**

This element specifies the variant of the target CPU, typically **x86, PPC, ARM, SH**

| Attribute | Value                                  |
|-----------|----------------------------------------|
| variant   | typically <b>x86, ppcbe, armle, sh</b> |

## Element `bsp`<#>

**<bsp type="import"> ... </bsp>**

This element provides the default configuration to the *QNX System Builder*.

See the *Building OS and Flash Images* section in the *QNX Momentics Integrated Development Environment - IDE 4.5 User's Guide* for an overview.

| Attribute | Value                              |
|-----------|------------------------------------|
| type      | Must be specified as <b>import</b> |

| Child Elements                         |
|----------------------------------------|
| <b>&lt;import&gt; &lt;/import&gt;+</b> |
| <b>&lt;imageCombine/&gt;</b>           |

## Element `import`<#>

`<import id="build file id"> path to build file </import>`

This element specifies a path to build file, which will be used as the basis to generate an image. Multiple build files can be referenced by multiple inclusions.

| Attribute | Value         |
|-----------|---------------|
| id        | Build file id |

## Element `imageCombine`<#>

`<imageCombine iplEnable="true" iplFileName="ipl filename" iplPadSize="pad size" finalEnable="true" finalFormat="format" />`

This element specifies the manner in which `mkrec` and `mkimage` will be invoked. It should be specified only once.

| Attribute    | Value                                                                                     |
|--------------|-------------------------------------------------------------------------------------------|
| iplEnable    | set to <b>true</b> to enable ipl inclusion in final file                                  |
| iplFileName  | IPL filename                                                                              |
| iplPadSize   | IPL padding size                                                                          |
| efsEnable    | set to <b>true</b> to combine images                                                      |
| efsAlignment | blocksize used when padding files                                                         |
| finalEnable  | set to <b>true</b> to enable final                                                        |
| finalOffset  | final offset                                                                              |
| finalPadding | final padding size                                                                        |
| finalFormat  | final format one of <b>bin</b> , <b>binary</b> , <b>srec</b> , <b>full</b> , <b>intel</b> |