



# **RELEASE NOTES**

## **BeyondStudio for NXP**

**JN-SW-4141**

**Build 1308**

**NXP Semiconductors**

For the contact details of your local NXP office or distributor, refer to:

[www.nxp.com](http://www.nxp.com)

## CONTENTS

<b>BeyondStudio for NXP Build 1308</b>	<b>3</b>
<b>1. Software Components</b>	<b>3</b>
<b>2. Supported Hardware Products</b>	<b>3</b>
<b>3. Operating System Support</b>	<b>3</b>
<b>4. File Integrity</b>	<b>3</b>
<b>5. Installation</b>	<b>4</b>
<b>6. Related Documentation</b>	<b>4</b>
<b>7. Release Details</b>	<b>4</b>
7.1 New Features and Changes	4
7.2 Bug Fixes	4
7.3 Modifications Required	4
7.4 Known Issues	4
<b>RELEASE HISTORY</b>	<b>5</b>
<b>8. Build 1299</b>	<b>5</b>
8.1 New Features and Changes	5
8.2 Bug Fixes	5
8.3 Modifications Required	5
8.4 Known Issues	6
<b>9. Build 1217</b>	<b>6</b>
9.1 New Features and Changes	6
9.2 Bug Fixes	7
9.3 Modifications Required	7
9.4 Known Issues	7
<b>10. Build 1111</b>	<b>7</b>
10.1 New Features and Changes	7
10.2 Bug Fixes	8
10.3 Modifications Required	8
10.4 Known Issues	8

# BeyondStudio for NXP Build 1308

## 1. Software Components

This release of BeyondStudio for NXP includes the following components and versions:

Component	Version
BeyondStudio for NXP IDE package	Build 1308

## 2. Supported Hardware Products

This software release supports the following hardware products:

Chips	Modules	Evaluation Kits
JN5169-001	-	-
JN5168-001	JN5168-001-M00 JN5168-001-M03 JN5168-001-M05 JN5168-001-M06	JN516x-EK001
JN5164-001	-	-
JN5161-001	-	-

## 3. Operating System Support

This release of BeyondStudio for NXP supports the following operating systems.

Microsoft Windows 7 Professional (32bit)	Microsoft Windows 7 Professional (64bit)
Microsoft Windows 7 Enterprise (32bit)	Microsoft Windows 7 Enterprise (64bit)
Microsoft Windows 8 Professional (32bit)	Microsoft Windows 8 Professional (64bit)
Microsoft Windows 8 Enterprise (32bit)	Microsoft Windows 8 Enterprise (64bit)

## 4. File Integrity

The following table indicates the MD5 checksum of files included in the release

File	MD5
JN-SW-4141 BeyondStudio for NXP v1308.exe	f3f77586fda022ec9d24ba2651545745

## 5. Installation

BeyondStudio for NXP is installed directly from the supplied installer. Please refer to *BeyondStudio for NXP Installation and User Guide (JN-UG-3098)* for the complete process.

Note that installation will remove any previous installations of BeyondStudio for NXP, including any installed SDKs. SDKs must be reinstalled after BeyondStudio for NXP has been installed.

## 6. Related Documentation

The following user documentation supports this software release:

- JN-UG-3098: BeyondStudio for NXP Installation and User Guide
- JN-AN-1202: BeyondStudio Migration Guidelines

## 7. Release Details

### 7.1 New Features and Changes

This release of BeyondStudio for NXP adds the following:

- Resolved issue with built-in JN51xx Flash Programmer (see below)

### 7.2 Bug Fixes

The following issues have been resolved in this release:

Internal ID	Description
lpsw6437	JN51xx Flash Programmer interface fails to load

### 7.3 Modifications Required

None

### 7.4 Known Issues

The following known issues remain in this release:

Internal ID	Severity	Description
lpsw4586	Low	<b>Issue:</b> Eclipse memory view fails to show ends of memory regions <b>Workaround:</b> None
lpsw4731	Medium	<b>Issue:</b> Eclipse does not detect when too many breakpoints are requested <b>Workaround:</b> Do not set more than 4 simple or 2 complex breakpoints
lpsw4914	Medium	<b>Issue:</b> Stack traceback ends within JenOS exception frame <b>Workaround:</b> None

## RELEASE HISTORY

### 8. Build 1299

#### 8.1 New Features and Changes

This release of BeyondStudio for NXP adds the following:

- IDE
  - Selecting a workspace directory for reading a device will automatically populate a filename.
  - The workspace is automatically refreshed before selecting a file for programming and after reading a device.

#### 8.2 Bug Fixes

The following issues have been resolved in this release:

Internal ID	Description
lpsw6310	JN5169 EEPROM write errors with bootloader 0x000B0002
lpsw6059	BeyondStudio toolchain search should ensure that only directories are considered to be toolchains
lpsw6003	Workspace button in Read Device dialogue box does not add workspace variable to filename

#### 8.3 Modifications Required

None

## 8.4 Known Issues

The following known issues remain in this release:

Internal ID	Severity	Description
lpsw4586	Low	<b>Issue:</b> Eclipse memory view fails to show ends of memory regions <b>Workaround:</b> None
lpsw4731	Medium	<b>Issue:</b> Eclipse does not detect when too many breakpoints are requested <b>Workaround:</b> Do not set more than 4 simple or 2 complex breakpoints
lpsw4914	Medium	<b>Issue:</b> Stack traceback ends within JenOS exception frame <b>Workaround:</b> None

## 9. Build 1217

### 9.1 New Features and Changes

This release of BeyondStudio for NXP adds the following:

- Device Support
  - Added support for JN5169
- Toolchain (r36379)
  - GCC Compiler updated to GCC 4.7.4
  - GDB Debugger updated to add support for JN5169
- IDE
  - Added new “Device Info” dialogue box in the “Devices” menu. This new dialogue allows the user to view the bootloader version, memory sizes and OTP device configuration.

## 9.2 Bug Fixes

The following issues have been resolved in this release:

Internal ID	Description
lpsw4548	Compiler exits with the following message: Internal compiler error: in do_SUBST, at combine.c:707
lpsw4913	Flash programmer should display bootloader version
lpsw4936	Flash programmer should work without FTDI driver being installed
lpsw4949	Flash Programmer / Java GUI holds a lock on the binary file

## 9.3 Modifications Required

None

## 9.4 Known Issues

The following known issues remain in this release:

Internal ID	Severity	Description
lpsw4586	Low	<b>Issue:</b> Eclipse memory view fails to show ends of memory regions <b>Workaround:</b> None
lpsw4731	Medium	<b>Issue:</b> Eclipse does not detect when too many breakpoints are requested <b>Workaround:</b> Do not set more than 4 simple or 2 complex breakpoints
lpsw4914	Medium	<b>Issue:</b> Stack traceback ends within JenOS exception frame <b>Workaround:</b> None

# 10. Build 1111

## 10.1 New Features and Changes

This is the first release of BeyondStudio for NXP, a new IDE for the JN516x series of wireless microcontrollers from NXP. The following items are changed from the previous JN516x toolchain, JN-SW-4041.

- Eclipse IDE based on the Kepler release
- Eclipse integrated Flash programming
- Eclipse integrated serial terminal
- Eclipse integrated GDB debugging
- Beyond Architecture toolchain based on GCC 4.7.3, binutils 2.22, gdb 7.5.1

## 10.2 Bug Fixes

None (first release)

## 10.3 Modifications Required

BeyondStudio for NXP is installed separately from all previous toolchains (e.g. JN-SW-4041) and provides a new environment. Please refer to the Application Note *BeyondStudio Migration Guidelines (JN-AN-1202)* for details of the migration process to BeyondStudio for NXP.

## 10.4 Known Issues

The following known issues remain in this release:

Internal ID	Severity	Description
lpsw4548	Low	<p><b>Issue:</b> Compiler exits with the following message: Internal compiler error: in do_SUBST, at combine.c:707</p> <p><b>Workaround:</b> Switch off optimisations on the function being compiled, by decorating it with the following: <code>__attribute__((optimize("O0")))</code></p>
lpsw4586	Low	<p><b>Issue:</b> Eclipse memory view fails to show ends of memory regions</p> <p><b>Workaround:</b> None</p>
lpsw4731	Medium	<p><b>Issue:</b> Eclipse does not detect when too many breakpoints are requested</p> <p><b>Workaround:</b> Do not set more than 4 simple or 2 complex breakpoints</p>
lpsw4914	Medium	<p><b>Issue:</b> Stack traceback ends within JenOS exception frame</p> <p><b>Workaround:</b> None</p>
lpsw4949	Medium	<p><b>Issue:</b> Flash Programmer / Java GUI holds a lock on the binary file</p> <p><b>Workaround:</b> After programming a binary file, wait 60 seconds before attempting to delete it or recompile</p>