

BDE-WF3235SX/SFX USER GUIDE

Introduction

This user guide is for BDE-WF3235SX and BDE-WF3235SFX, wireless modules based on TI CC3235S and CC3235SF.

It is a quick start guide for how to use the BDE-WF3235SX and BDE-WF3235SFX with the SimpleLink™ CC3235 Launchpad™ Development Kit, and how to build the first application. It also shows a demo for how to send commands to control the BDE-WF3235SX and BDE-WF3235SFX module by UART.

Get Ready

The following tools are recommended to develop with BDE-WF3235SX/SFX.

Hardware tools:

- A BDE-WF3235SX or BDE-WF3235SFX(BDE-WF3235SX/SFX-BDE Technology Inc.(bdecomm.com))
- A adaptor board
- PC or Laptop
- the SimpleLink™ CC3235 Launchpad™ Development Kit
- USB cable for power supply and debugging

Software tools:

- <u>CCS</u>
- Uart Assistant
- Uniflash
- Service Pack

(path:ti\simplelink_cc32xx_sdk_5_30_00_08\tools\cc32xx_tools\servicepack-cc3x35)

- Software Development Kit (SDK):
 - simplelink cc32xx sdk

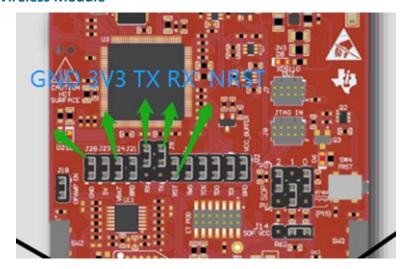
Build Your First Application

Once have the Hardware and Software tools in place, please follow the following steps:

A. Connect the Hardware

 Connect the 3135 moudle and the LanchPad with jumpers as the fallowing shows.





WF-3235SX/SFX	LAUNCHXL-CC3235SF
3V3	J24(3V3)
GND	J28(GND)
TX1	RX
RX1	TX
NRST	RST
TMS	TMS
TCK	TCK
TDI	TDO
TDO	TDI

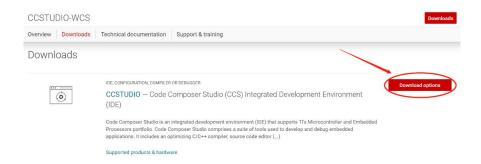
B. Build the Application

Download and install the CCS and SDK

From the above links, follow the instructions in the following steps to download and install the CCS and SDK. Some versions will be prompted with a mismatch. If this occurs, please download CCS11.1.0.

CCS Installation

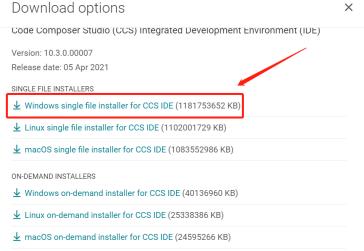
Click on this option





Select an option to download CCS

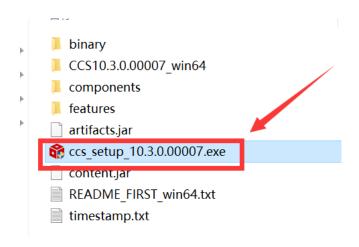
Download antiana



3. Unzip the package to a local disc

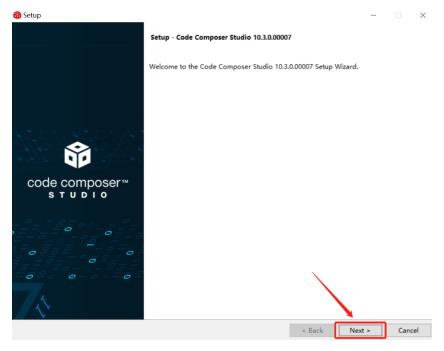


4. Click the setup of CCS

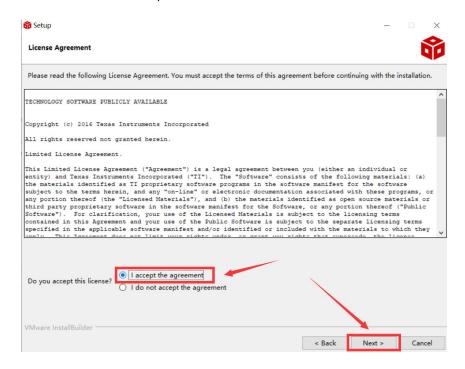




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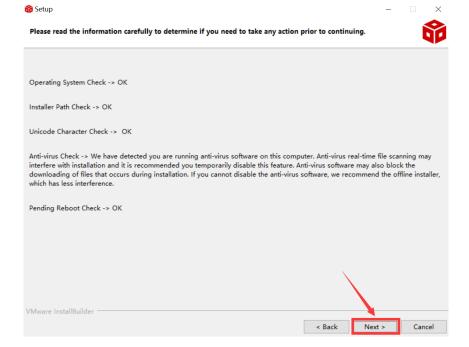


6. Select the default option

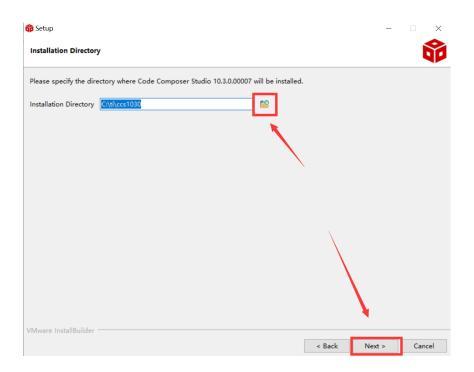




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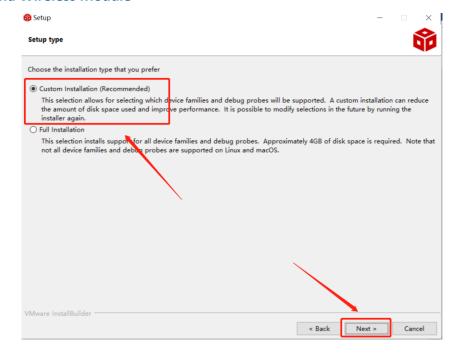
8. Select the Installation Directory



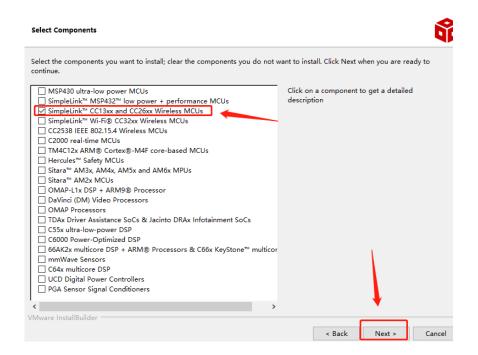
9. Select the default option



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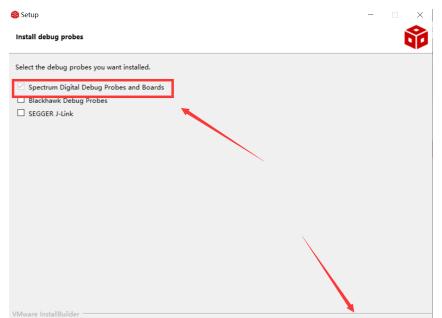


10. Select the component



11. Select the default option

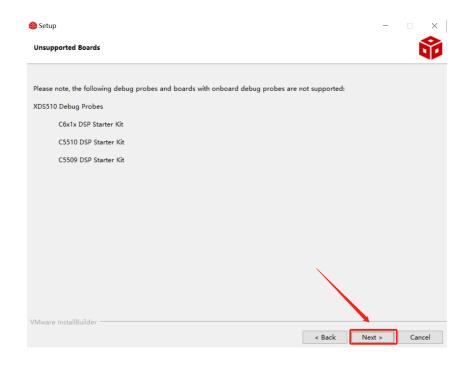




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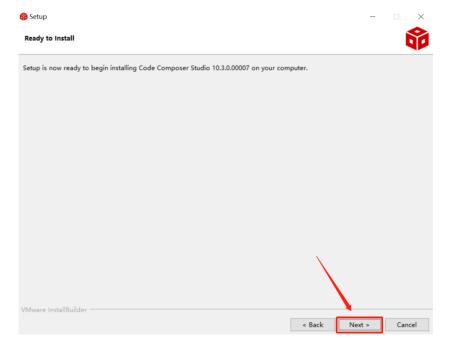
Cancel



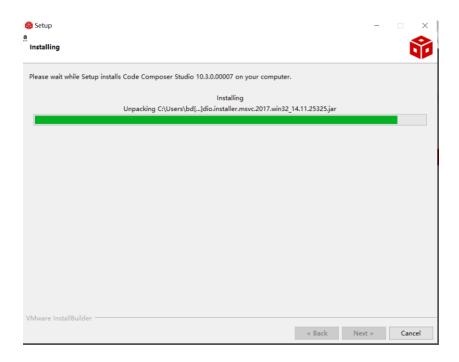
13. Click "Next"



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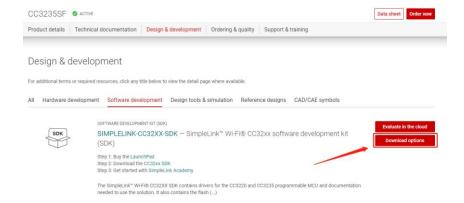
14. Waiting for installation to complete



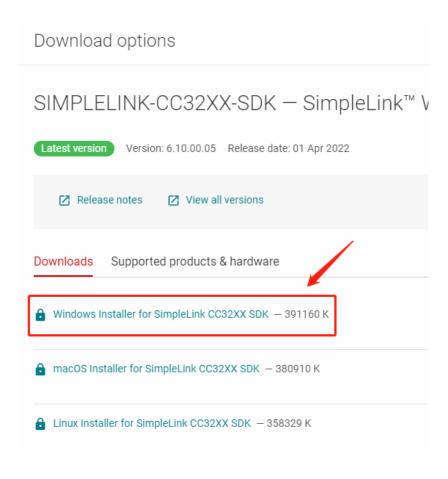
- Software Development Kit (SDK) installation
 - simplelink_cc32xx_sdk_5_30_00_08
 - 1. Click on this option



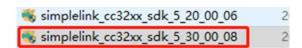




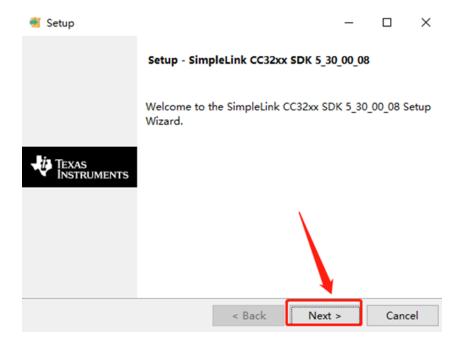
2. Select an option you need to download SDK



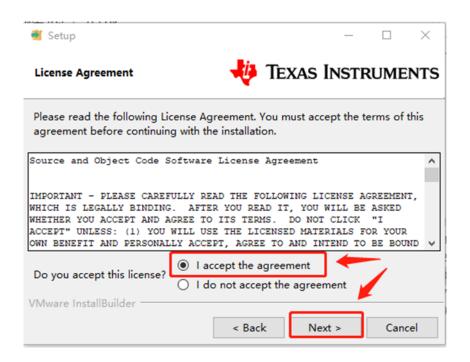
3. Installation







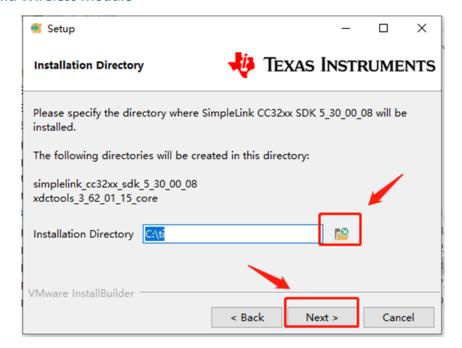
Select the default option

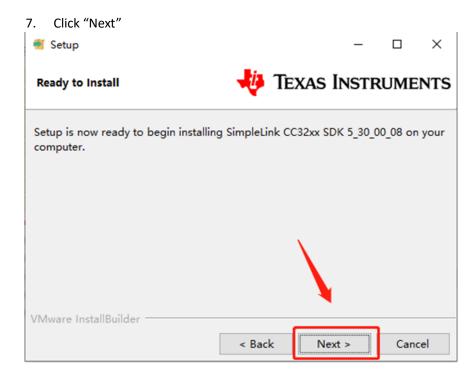


Select the Installation directory



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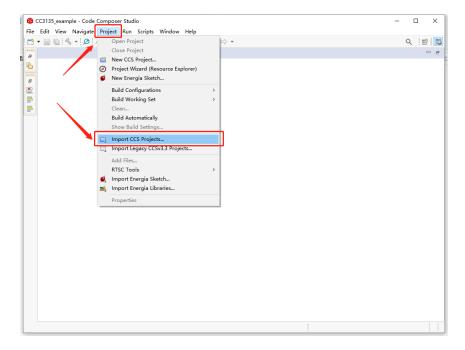




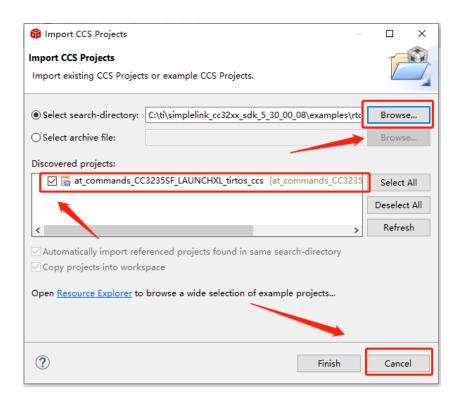
- 8. Waiting for installation to complete
- Run an example/demo code
 - 1. For the first module, find the option named "Import CCS project..."



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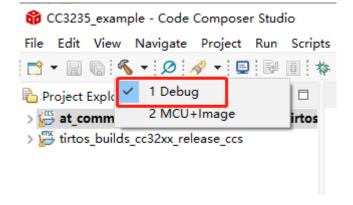
 According to the following path to find the sending end project: ti\simplelink_cc32xx_sdk_5_30_00_08\examples\rtos\CC3235SF_LAUNC HXL\demos\at_commands\tirtos\ccs



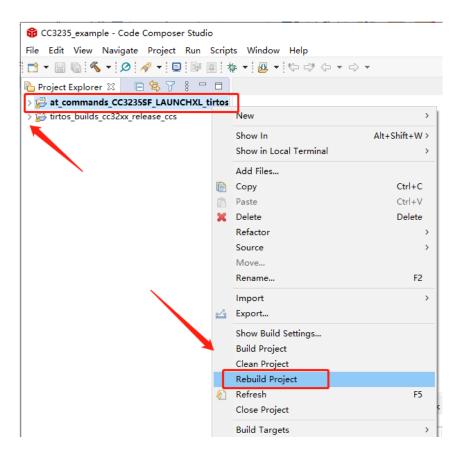
3. Switch to the debug mode



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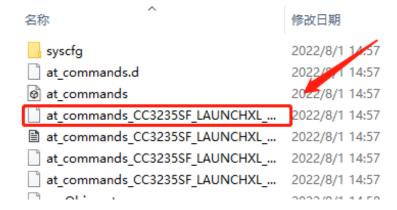
4. Right Click the project to build the receiving end project



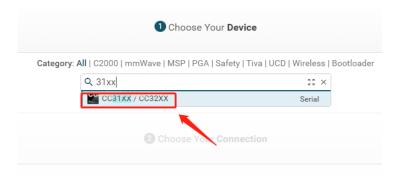
Follow the following path to find the firmware: workplace\ at_commands_CC3235SF_LAUNCHXL_tirtos_ccs\Debug



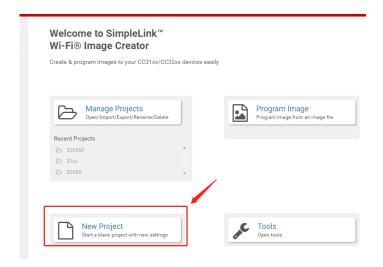




- 6. Download the firmware to the module using Uniflash
 - Choose the device



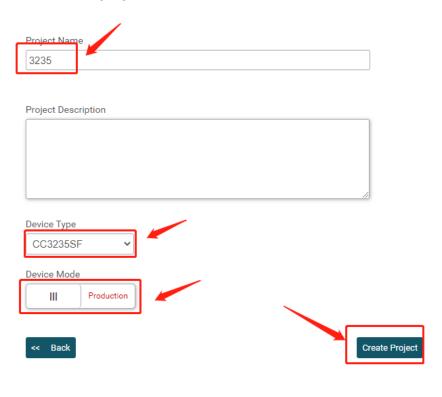
· Build a new project



 Choose the device type and switch to the development mode if you want enter the debug mode, or choosing the production if it just for producing.

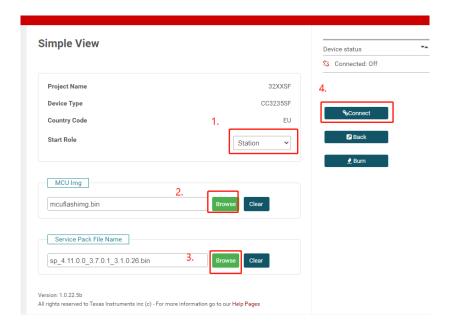


Start new project



Version: 1.0.22.5b

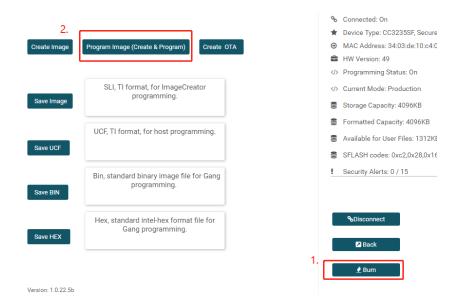
• Change the Start Role and upload the MCU Img and the Service Pack. Then click the "connect".



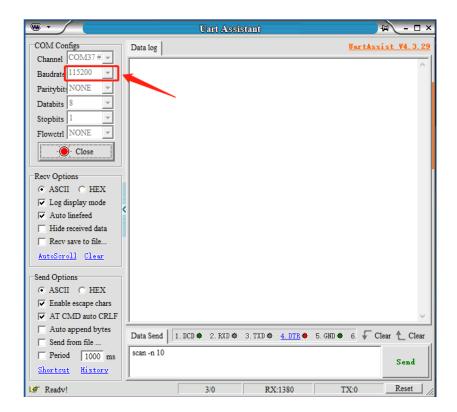
• When connect successfully, download the firmware to the



device.

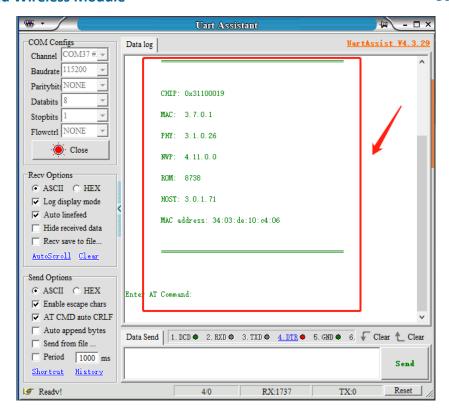


7. Open the Uart Assistant, set the options

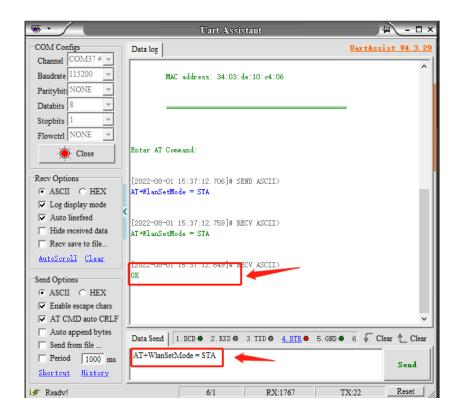


Reset the device, the Uart Assistant will receive the Initialization Information as the following shows.

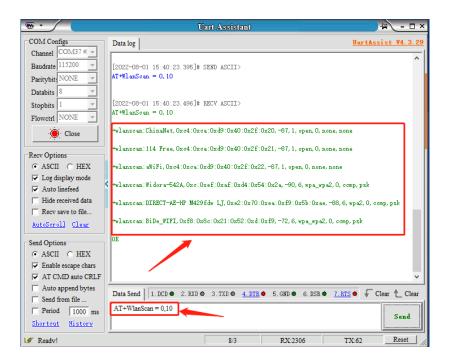
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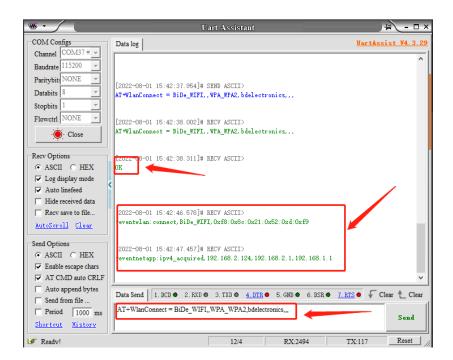
9. Send the command (AT+WlanSetMode = STA) to change the device to the station mode.



10. Send the command (AT+WlanScan = 0,10) to get the AP that can be connected



11. Find the AP which you want to connect, send the command (AT+WlanConnect = AP_Name,,WPA_WPA2,passward,,,,)



12. When you receive this message, you have successfully connected to this AP. You can also follow the Initialization Information to send other commands to control it.

For further development, please check out the CC3235S and CC3235SF SimpleLink™ Wi-Fi®, Dual-Band, Single-Chip Solution and SimpleLink™ Wi-Fi® AT Command User's Guide.



Other Resources

macOS Installer for SimpleLink CC32XX SDK

Linux Installer for SimpleLink CC32XX SDK

Mac OS Installer for Code Composer Studio IDE

Linux Installer for Code Composer Studio IDE

Revision History

Revision	Date	Description
V1.0	29-Jul-2022	Initial Released

More Questions:

Please search existing answers on TI E2E support forums

Contact your local TI sales representative.

Or

Contact BDE Technology, Inc.

China:

B2-403, 162 Science Ave, Huangpu District, Guangzhou, 510663

Tel: +86-020-28065335

Website: http://www.bdecomm.com/cn/ Email: shu@bdecomm.com

USA:

67 E Madison St, #1603A, Chicago, IL 60603

Tel: +1-312-379-9589

Website: http://www.bdecomm.com/ Email: info@bdecomm.com/

BDE Technology Inc. info@bdecomm.com