NYB55 Series

Getting Started Guide for AWS IoT Greengrass

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1 Document information

Version	Date	Description
1.0	May 2024	Publish Document

2 Overview

The OMRON NYB(55) Series industrial PCs have been designed to be powerful, reliable, and scalable.

They are ideally suited for visualization, data handling/processing, measurement, and control applications.

3 Hardware description

3.1 Datasheet

Product Name	Datasheet URL
NYB	<u>Datasheet</u>

3.2 Standard kit contents

Default Packing List

- Power connector
- I/O connector
- Drive bracket for drive mounting
- 4 mounting screws for drive installation
- PCIe card support for PCIe card installation
- PCIe card clip for PCIe card installation

3.3 User provided items

Not Applicable.

3.4 3rd party purchasable items

Not Applicable.

4 Set up your development environment

4.1 Tools installation (IDEs, Toolchains, SDKs)

Follow the steps in this section to set up a Linux or Windows device to use as your AWS IoT Greengrass core device.

Install the Java runtime, which AWS IoT Greengrass Core software requires to run.

5 Set up device hardware

Step 1: Attach a 24V power supply to the IPC(NYB) and turn it on.

Step 2: Execute Windows OOBE, set up Windows, and make it ready for login.

6 About AWS IoT Greengrass

To learn more about AWS IoT Greengrass, see <u>How AWS IoT Greengrass works</u> and <u>What's new</u> in AWS IoT Greengrass Version 2.

7 Greengrass prerequisites

Refer to the online documentation detailing the <u>prerequisites</u> needed for AWS IoT Greengrass. Follow the instructions in the following sections:

Step 1: Set up an AWS account

Step 2: Set up your environment

8 Install AWS IoT Greengrass

Follow the online guide to <u>Install with automatic provisioning</u>. Refer to the instructions in the following steps:

- Set up the device environment
- <u>Provide AWS credentials to the device</u>. For development environments, you can use the option "Use long-term credentials from an IAM User". An example of how to do this is shown below:

export AWS_ACCESS_KEY_ID=<the access key id for your user>
export AWS SECRET ACCESS KEY=<the secret access key for your user>

- Download the AWS IoT Greengrass Core software
- Install the AWS IoT Greengrass Core software

9 Create a "Hello World" component

9.1 Create the component on your edge device

Follow the instructions online under the section <u>Develop and test a component on your device</u> to create a simple component on your device.

9.2 Upload the "Hello World" component

Follow the instructions online at <u>Create your component in the AWS IoT Greengrass service</u> to upload your component to the cloud, where it can be deployed to other devices as needed.

9.3 Deploy your component

Follow the instructions online at <u>Deploy your component</u> to deploy and verify that your component is running.

10 Troubleshooting

For more information, refer to the online documentation <u>Troubleshooting Greengrass v2</u>. If you have any questions, please contact us at <u>ipc-support</u> email address.