KCO-2000-RPL Fanned Industrial Computer With 2U Short-Depth,12/13th Gen Intel® Core® Processor And Q670E PCH, PCIe Gen 5, USB Type-C Getting Started Guide for AWS IoT Greengrass

Table of Contents

1   Document Information

Version	Date	Description
1.0	December 2023	Publish Document

2   Overview

2.1   Introduction
Designed with Intel® 12th / 13th Gen. Intel® Core™ processors, Premio's Certification-Ready industrial computers are embedded computing solutions that act as sub-assembly building blocks or final OEM system configuration in key enterprise and IoT applications. System integrators and platform builders can accelerate time-to-market with this certification-ready industrial computer for new product introduction (FCC, CE, and UL). This industrial computer also acts as a perfect solution to upgrade legacy computing platforms that require re-certification of sub-assembly builds in a accredited lab. The KCO-2000 industrial computer is a commercial off the shelf (COTS) computing solution that provides reliability and embedded longevity with its extended lifecycle support.

The certification-ready KCO-2000 industrial computer is deplpoyable in applications that rely on computing solution in Kiosks, ATMs, Security and Surveillance, Metrology and Automation inspection, and mobile medical carts.

2.2   About AWS IoT Greengrass

To learn more about AWS IoT Greengrass, see how it works and what's new.

3   Hardware Description

3.1   DataSheet
Click on this link (https://premio.blob.core.windows.net/premio/uploads/resource/data-sheet/KCO-RPL/DS_KCO-2000-RPL_Premio.pdf) to view the datasheet of KCO-2000-RPL.

3.2   Additional Hardware References
Please refer to the KCO-2000-RPL device page for more product details

3.3   User Provided Items
Not applicable.

3.4   3rd Party Purchasable Items
Not applicable.

4   Set up your Development Environment
AWS IoT Greengrass supports both Windows and Linux:
https://docs.aws.amazon.com/greengrass/v2/developerguide/operating-system-feature-support-matrix.html.

Please refer to the developer guide for the required tools and proper setup:
https://docs.aws.amazon.com/greengrass/v2/developerguide/what-is-iot-greengrass.html

It is recommended to install the following tools/SDKs:
- Java Runtime Environment (JRE) version 8 or greater
- Java Development Kit (JDK) Amazon Corretto 11
  (https://aws.amazon.com/corretto/) or OpenJDK 11 (https://openjdk.java.net/)
- GNU C Library (https://www.gnu.org/software/libc/); (glibc) version 2.25 or
  greater

5   Set up your Hardware

Please refer to the device user's manual for the hardware setup.

6   Setup your AWS account and Permissions

Refer to the online AWS documentation at Set up your AWS Account:
https://docs.aws.amazon.com/iot/latest/developerguide/setting-up.html

Follow the steps outlined below to create your account and user to get started:
• Sign up for an AWS account:
https://docs.aws.amazon.com/iot/latest/developerguide/setting-up.html#aws-registration
• Create a user and grant it the proper permissions:
https://docs.aws.amazon.com/iot/latest/developerguide/setting-up.html#create-iam-user
• Open the AWS IoT console:
https://docs.aws.amazon.com/iot/latest/developerguide/setting-up.html#iot-console-signin

7   Create Resources in AWS IoT

Refer to the instructions on how to create AWS IoT resource:
https://docs.aws.amazon.com/iot/latest/developerguide/create-iot-resources.html

Follow the steps outlined in these sections to provision resources for your device:
- Create an AWS IoT Policy
- Create a thing object

8   Install the AWS Command Line Interface

To install the AWS CLI on your host machine, refer to the instructions:
https://docs.aws.amazon.com/cli/latest/userguide/getting-started-install.html

Installing the CLI is required to complete the instructions in this guide. Once you have installed AWS CLI, configure it per the instructions:
https://docs.aws.amazon.com/cli/latest/userguide/cli-configure-quickstart.html#cli-configure-quickstart-config

Set the appropriate values for access key ID, secret access key, and AWS Region based on your AWS account. You can set Output format to "json" if you prefer.

9   Install AWS IoT Greengrass

Refer to the instructions on how to install AWS IoT Greengrass Core:
https://docs.aws.amazon.com/greengrass/v2/developerguide/install-greengrass-core-v2.html

You can download the latest version of the AWS IoT Greengrass Core from this location:
https://d2s8p88vqu9w66.cloudfront.net/releases/greengrass-nucleus-latest.zip

Alternatively, you can download a specific version of the AWS IoT Greengrass Core software from the location below. Replace version with the version you wish to download:
https://d2s8p88vqu9w66.cloudfront.net/releases/greengrass-**version**.zip

10 Create a Hello World Component

In AWS IoT Greengrass v2, components can be created on the edge device and uploaded to the cloud, or vice versa.

To create, deploy, test, update and manage a simple component on your device, follow the instructions under the section "To Create a Hello World Component":
https://docs.aws.amazon.com/greengrass/v2/developerguide/getting-started.html

To upload the component to the cloud, follow the instructions under the section "Upload Your Component":
https://docs.aws.amazon.com/greengrass/v2/developerguide/upload-first-component.html

10.1 Deploy your component

Follow the instructions online at [Deploy your Component](#) to deploy and verify that your component is running.

11 Troubleshooting

For AWS IoT Greengrass general troubleshooting tips, please refer to:
https://docs.aws.amazon.com/greengrass/v2/developerguide/troubleshooting.html

For device specific troubleshooting guide, please contact us directly at techsupport@premioinc.com.