



QUICK START GUIDE

Apollo3 Blue Plus Voice-on-SPOT

Ultra-Low Power Apollo SoC Family

A-SOCA3P-QSGA02EN v1.2



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Revision History

Revision	Date	Description
1.0	December 6, 2022	Document initial public release
1.1	March 7, 2023	Changed packages, example names, path of examples, and some descriptions.
1.2	August 1, 2023	Updated title and content in section 2.1 Lite Version

Reference Documents

Document ID	Description
A-SOCA3P-UGNA01EN	Apollo3 Blue Plus Voice-on-SPOT User's Guide

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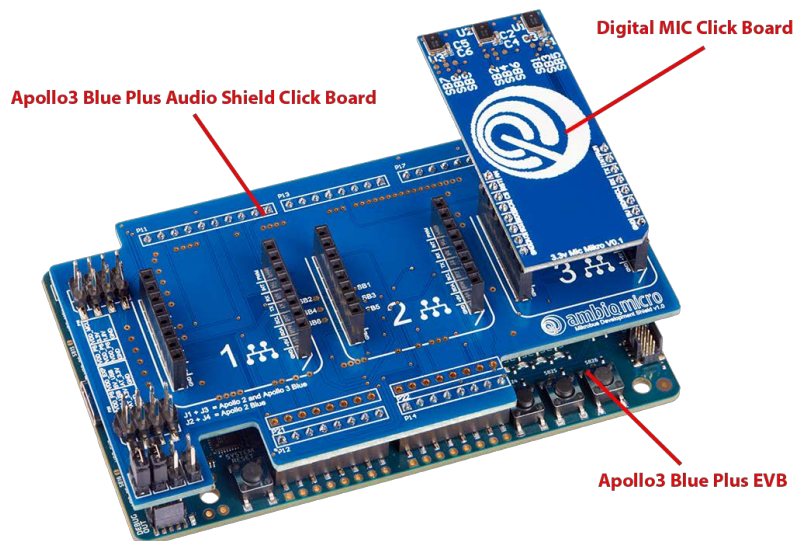
1

Apollo3 Blue Plus Voice-on-SPOT Evaluation Kit

1.1 Hardware

- Apollo3 Blue Plus EVB
- Apollo3 Blue Plus Audio Shield Click Board
- Digital MIC Click Board

Figure 1-1: Apollo3 Blue Plus Voice-on-SPOT Kit



1.2 Software

- Ambiq Voice-on-SPOT SDK: **AmbiqVoS_R3.0.x.zip**
- Ambiq Voice-on-SPOT SDK with third party engine packages:
 - DSPC TalkTo package: **AmbiqVoS_R3.0.x_TalkTo.zip**
 - Sensory THF package: **AmbiqVoS_R3.0.x_THF.zip**

SECTION

2

Alexa Voice Service Demo

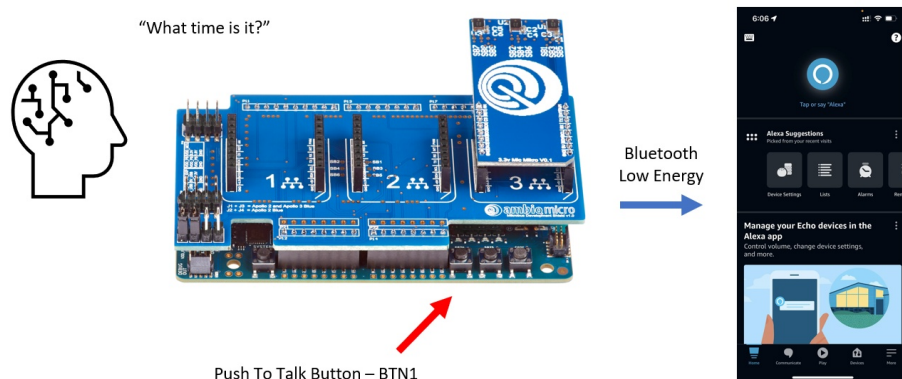
2.1 Lite Version

Use the following to try the lite version demo using the MEMSensing Digital MIC Click Board:

NOTE: The lite version supports Push to Talk for user utterance transfer.

1. Build **vos_ble_lite** example:
`boards/apollo3p_evb/examples/vos_ble_lite`
2. Make sure the default setting is for DMIC (Slot MB3).
3. Download binary to the Apollo3 Blue Plus EVB using Segger J-Flash Lite or download from IDEs (e.g., IAR, Keil).
4. Reset and connect with the Alexa app (e.g., iOS, Android).
5. Open the Alexa app, select **Device, Add Device**, then select **Headphones**.
6. Connect to **VoS-xxx-AMA-xxx**.
7. Push **BTN1** button on the Apollo3 Blue Plus EVB.
8. Ask a question or command (e.g., "what time is it?", "what's the weather in NY?")

Figure 2-1: Light Version Demo



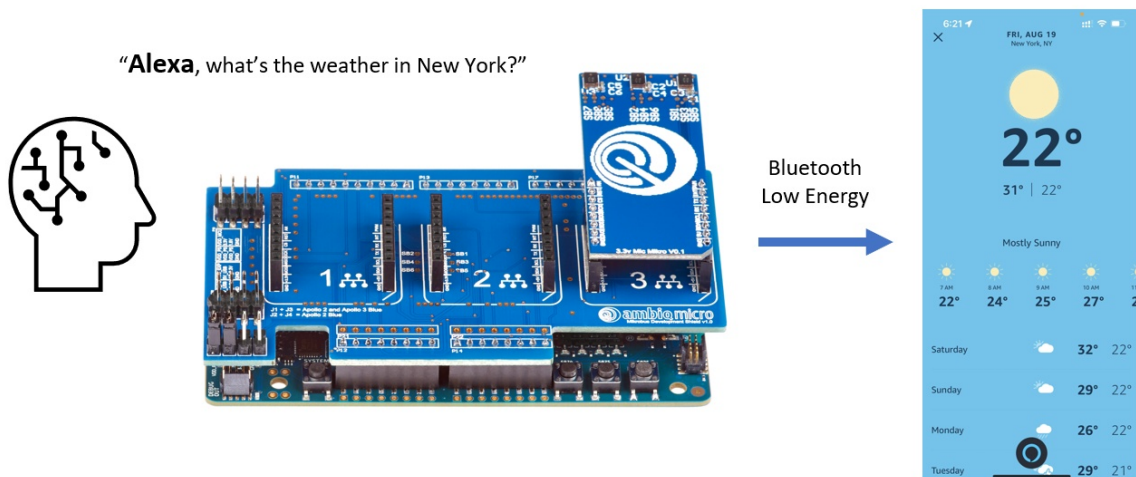
2.2 Always-on Listening (Wake Word Detection) - Sensory TrulyHandsFree (THF) Engine

Use the following to try the always-on listening (wake word detection) Sensory THF engine demo:

NOTE: In order to support wake word detection, you must have the Sensory THF add-on package.

1. Download **AmbiqVoS_R3.0.x_THF.zip** package.
2. Build **vos_ble_thf** example:
`boards/apollo3p_evb/examples/vos_ble_thf`
3. Make sure the default setting is for DMIC (Slot MB3).
4. Download binary to Apollo3 Blue Plus EVB using Segger J-Flash Lite or download from IDEs (e.g., IAR, Keil).
5. Reset and connect with Alexa app (e.g., iOS, Android).
6. Open the Alexa app, select **Device, Add Device**, then select **Headphones**.
7. Connect to **VoS-xxx-AMA-xxx**.
8. Ask a question or command (e.g., **“Alexa, what time is it?”**, **“Alexa, what’s the weather in New York?”**)

Figure 2-2: Always-on Listening (Wake Word Detection) - Sensory THF Engine



For additional information regarding the VoS SDK, refer to the *Apollo3 Blue Plus Voice-on-SPOT Kit Reference Design User’s Guide*.



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