

Rev 0.1 10/12

- Class-D ToolStick Quick Start Guide (this document)
- 2 x cylinder cutouts
- 1 x 1 W speaker
- 1 x male-to-male stereo cable
- 2 x mini USB cables
- Class-D ToolStick board

The Class-D ToolStick kit contains the following:
 The Class-D ToolStick demonstrates direct-drive Class-D amplification using the SIM2U1xx high drive I/O. The kit demonstrates integrated USB 2.0 full-speed transceiver, internal oscillator and phase-locked loop (PLL), up to 300 mA high-drive I/O, dual SAR ADCs, enhanced programmable counter array (PCA), and capacitive sensing.

CLASS-D TOOLSTICK KIT QUICK-START GUIDE



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This evaluation board/kit ("EVB/Kit") is intended for use for ENGINEERING DEVELOPMENT, TESTING, DEMONSTRATION, OR EVALUATION PURPOSES ONLY and is not a finished end-product fit for general consumer use. ANY OTHER USE, RESALE, OR REDISTRIBUTION FOR ANY OTHER PURPOSE IS STRICTLY PROHIBITED. This EVB/Kit is not intended to be complete in terms of required design-, marketing-, and/or manufacturing-related protective considerations, including product safety and environmental measures typically found in end products that incorporate such semiconductor components or circuit boards. As such, persons handling this EVB/Kit must have electronics training and observe good engineering practice standards. As a prototype not available for commercial reasons, this EVB/Kit does not fall within the scope of the European Union directives regarding electromagnetic compatibility, restricted substances (RoHS), recycling (WEEE), FCC, CE or UL, and therefore may not meet the technical requirements of these directives or other related directives.

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Please read the User's Guide and, specifically, the Warnings and Restrictions notice in the User's Guide prior to handling the EVB/Kit. This notice contains important safety information about temperatures and voltages. For additional environmental and/or safety information, please contact a Silicon Labs application engineer or visit www.silabs.com/support/quality.

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User's use of this EVB/Kit is conditioned upon acceptance of the foregoing conditions. If User is unwilling to accept these conditions, User may request a refund and return the EVB/Kit to Silicon Labs in its original condition, unopened, with the original packaging and all documentation to:

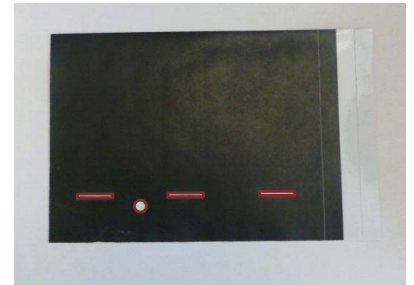
Mailing Address:
 400 W. Cesar Chavez
 Austin, TX 78701

A. Creating the Speaker Housing

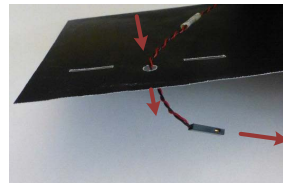
- 1 To assemble the speaker housing, use one cylinder cutout and the speaker. The second cylinder cutout is extra in case it's needed.



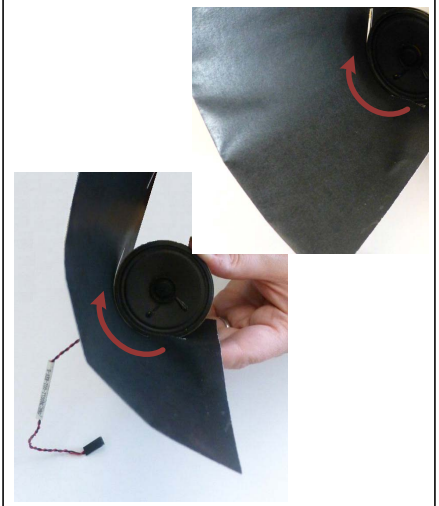
- 2 Pop out all of the tabs in the cylinder cutout.

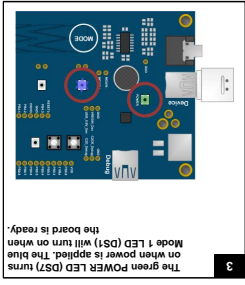
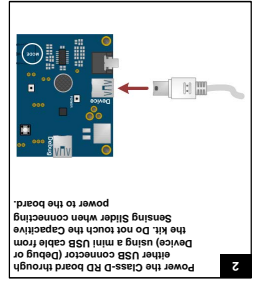
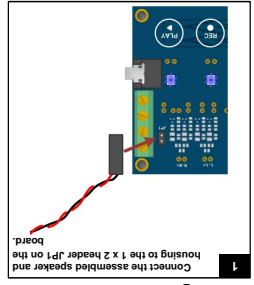


- 3 With the solid black side facing up, push the speaker cable through the round hole and pull it through.



- 4 Place the edges of the speaker in the small rectangular tabs and roll the cylinder around the speaker.





B. Using the Demo

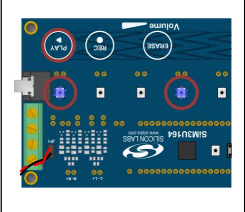
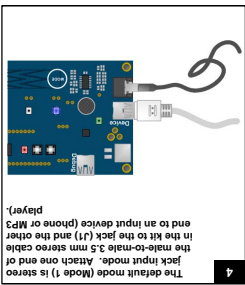


C. Relevant Documentation

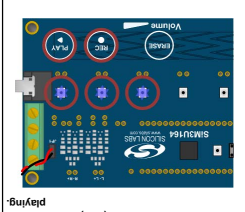
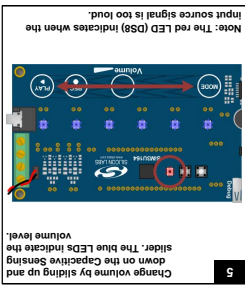
- Application Notes:
- AN276: Class-D Toolstick User's Guide
 - AN270: Getting Started with the Silicon Labs Precision2 Appbuilder
 - AN672: Precision32 CMSIS and HAL User's Guide
 - AN664: Precision32 CMSIS and HAL User's Guide
 - AN672: Precision32 s32Library Overview
- Download the Precision32 software:
- <http://www.silabs.com/32bit-software>
- Class-D Toolstick Landing Page:
- <http://www.silabs.com/rootsticclassd>
- SIM3U1xx Datasheet:
- <http://www.silabs.com/Support/TechnicalDocs/SIM3U1xx.pdf>
- SIM3U1xx Reference Manual:
- <http://www.silabs.com/Support/TechnicalDocs/SIM3U1xx.pdf>
- SIM3C1xx R.M.pdf
- <http://www.silabs.com/Support/TechnicalDocs/SIM3U1xx.pdf>
- MCU Knowledge Base:
- <http://www.silabs.com/Support/TechnicalDocs/SIM3U1xx.pdf>
- Contact an Applications Engineer:
- <http://www.silabs.com/Support/TechnicalDocs/SIM3U1xx.pdf>
- Quality Documents:
- <http://www.silabs.com/Support/TechnicalDocs/SIM3U1xx.pdf>
- www.silabs.com/quality



In USB mode, connect the Device USB connector to the PC using the mini USB cable, if it's not already connected. Ensure the device appears in Device Manager.



In Play/Record Flash mode, press the REC button to record and the PLAY button to play the recorded message. The blue LED (DS5) turns on when recording, and the blue LED (DS5) turns on when playing.



Mode 1 = Stereo Audio Jack
Mode 2 = USB
Mode 3 = Play Pre-recorded Flash
Mode 4 = Play/Record Flash

