

Rev 0.1 10/12

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

The Class-D ToolStick kit contains the following:

The Class-D ToolStick demonstrates direct-drive Class-D amplification using the SiM3U1xx high drive I/O. The kit demonstrates the 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 (EPCA), and capacitive sensing.

CLASS-D TOOLSTICK KIT QUICK-START GUIDE



EVALUATION BOARD/KIT IMPORTANT NOTICE

Silicon Laboratories Inc. and its affiliated companies ("Silicon Labs") provides the enclosed evaluation board/kit to the user ("User") under the following conditions:

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.

Should this EVB/Kit not meet the specifications indicated in the User's Guide, the EVB/Kit may be returned within 30 days from the date of delivery for a full refund. THE FOREGOING WARRANTY IS THE EXCLUSIVE WARRANTY MADE BY SILICON LABS TO USER, IS USER'S SOLE REMEDY, AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED, IMPLIED, OR STATUTORY, INCLUDING ANY WARRANTY OF MERCHANTABILITY, NONINFRINGEMENT, DESIGN, WORKMANSHIP, OR FITNESS FOR ANY PARTICULAR PURPOSE.

User assumes all responsibility and liability for proper and safe handling of the EVB/Kit. Further, User indemnifies Silicon Labs from all claims arising from User's handling or use of the EVB/Kit. Due to the open construction of the EVB/Kit, it is User's responsibility to take any and all appropriate precautions with regard to electrostatic discharge.

EXCEPT TO THE EXTENT OF THE INDEMNITY SET FORTH ABOVE, NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES.

Neither Silicon Labs nor User is obligated to perform any activities or conduct any business as a consequence of using the EVB/Kit, and neither party is entitled to any form of exclusivity with respect to the EVB/Kit.

Silicon Labs assumes no liability for applications assistance, customer product design, software performance, or infringement of patents or services described herein.

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.

No license is granted under any patent right or other intellectual property right of Silicon Labs covering or relating to any machine, process, or combination in which the EVB/Kit or any of its components might be or are used.

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

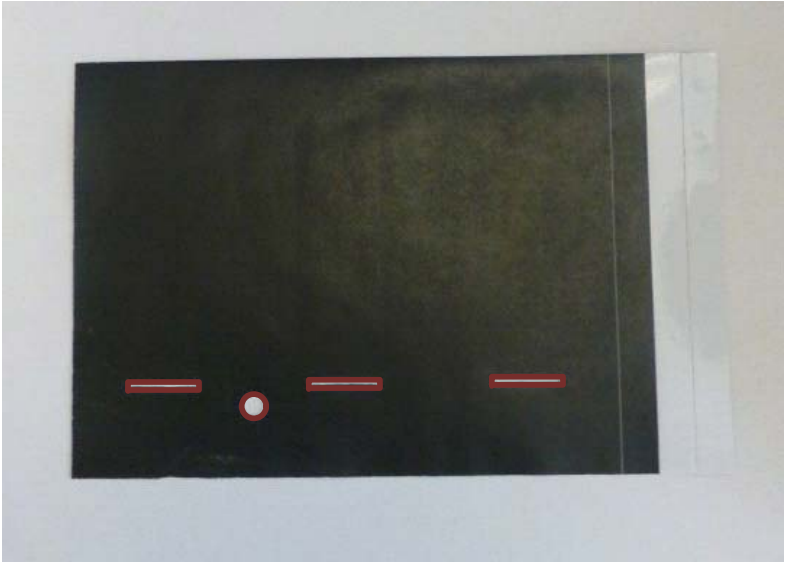
1

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



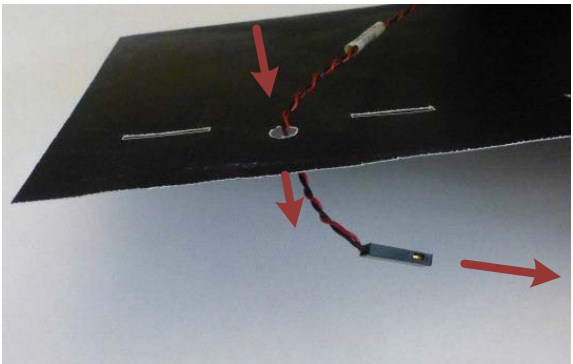
2

Pop out all of the tabs in the cylinder cutout.



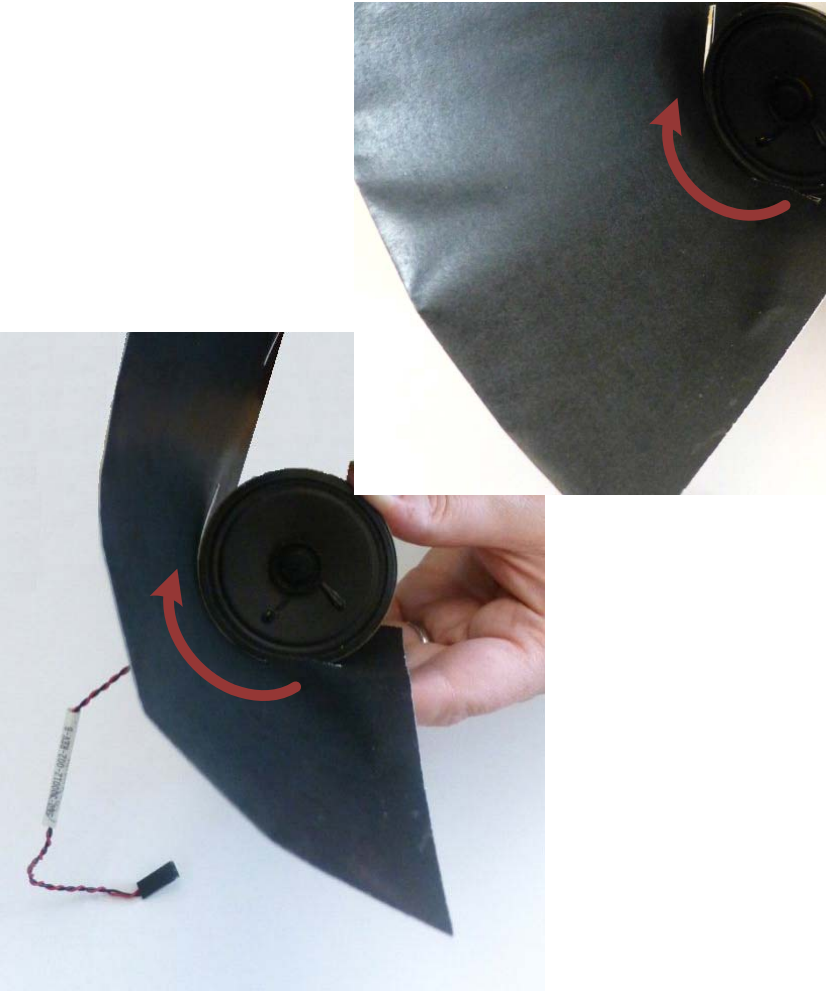
3

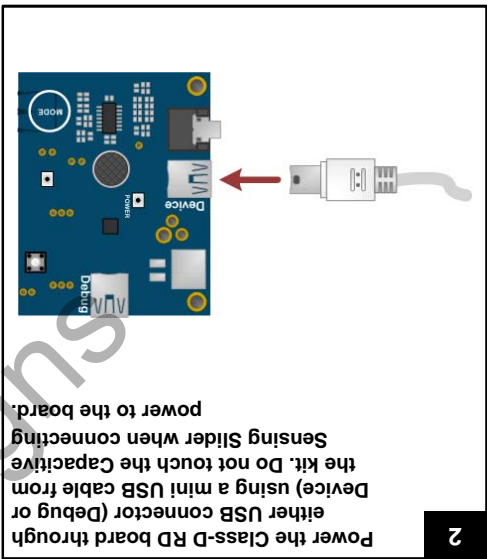
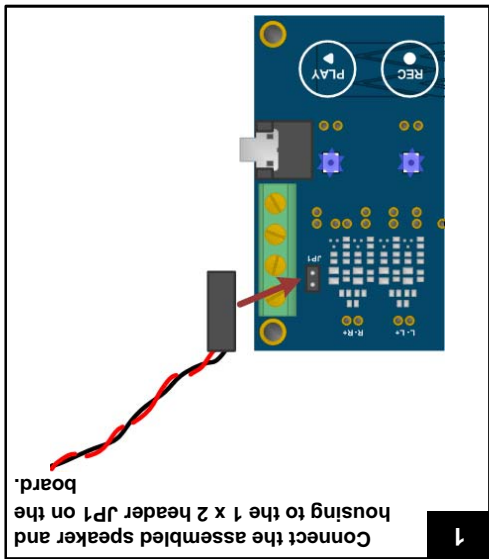
With the solid black side facing up, push the speaker cable through the round hole and pull it through.



4

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

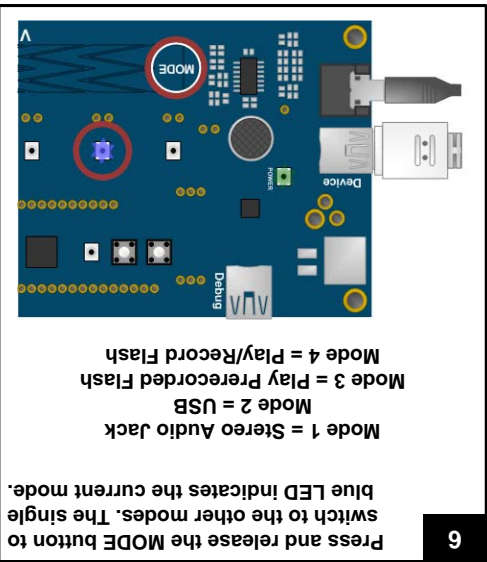
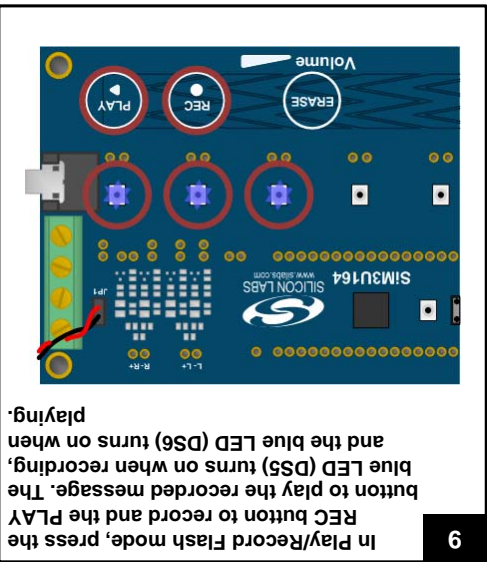
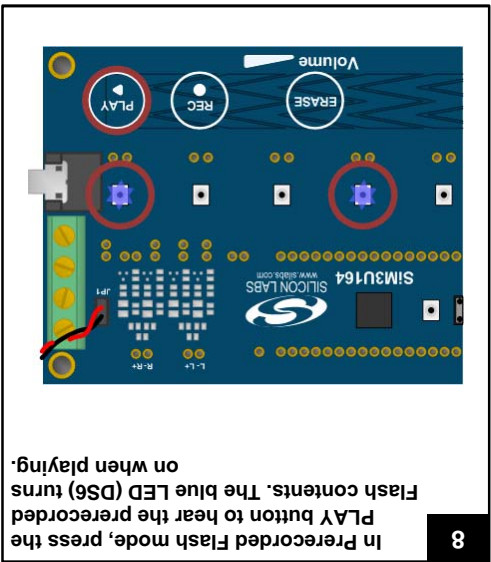
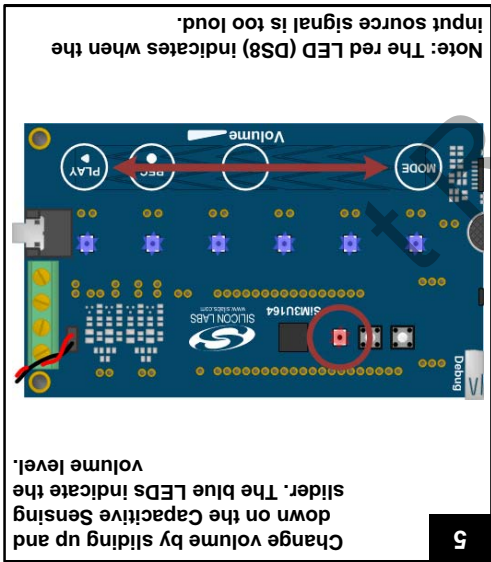
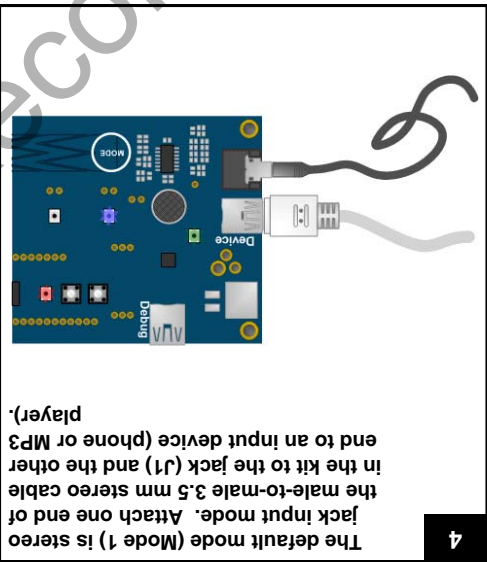




B. Using the Demo



C. Relevant Documentation



Application Notes:
www.silabs.com/appnotes

- AN726: Class-D ToolStick User's Guide
- AN670: Getting Started with the Silicon Labs Precision32 AppBuilder
- AN667: Getting Started with the Silicon Labs Precision32 IDE
- AN664: Precision32 CMSIS and HAL User's Guide
- AN672: Precision32 s132Library Overview

Download the Precision32 software:
<http://www.silabs.com/32bit-software>

Class-D ToolStick Landing Page:
<http://www.silabs.com/toolstickclassd>

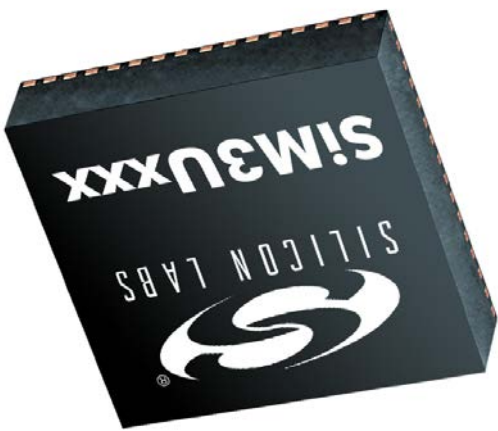
SIM3U1xx Datasheet:
<http://www.silabs.com/Support%20Documents/TechnicalDocs/SIM3U1xx.pdf>

SIM3U1xx Reference Manual:
http://www.silabs.com/Support%20Documents/TechnicalDocs/SIM3U1xx_-SIM3C1xx_RM.pdf

MCU Knowledge Base:
http://www.silabs.com/Support%20Documents/TechnicalDocs/SIM3U1xx_-SIM3C1xx_RM.pdf

Contact an Applications Engineer:
http://www.silabs.com/Support%20Documents/TechnicalDocs/SIM3U1xx_-SIM3C1xx_RM.pdf

Quality Documents:
http://www.silabs.com/Support%20Documents/TechnicalDocs/SIM3U1xx_-SIM3C1xx_RM.pdf



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Silicon Laboratories:

TOOLSTICKCLASSD