
AT32F435/437 OTG1 Host OTG2 Device

Introduction

This sample code demonstrates the application of two OTGs (OTG1: Host mode, OTG2: Device mode), where OTG1 Host mode supports HID composite devices (HID, Keyboard, mouse) and OTG2 serves as a HID device.

Note: The corresponding code in this application note is developed on the basis of V2.x.x BSP provided by Artery. For other versions of BSP, please pay attention to the differences in usage.

Applicable products:

Part number	AT32F435/437
-------------	--------------

List of peripherals:

Main peripheral	OTG
-----------------	-----

1 Application method

1.1 Hardware requirements

- 1) AT-START-F437 V1.0 evaluation board (or the corresponding evaluation board of other series)

1.2 Software requirements

- 1) SourceCode
 - SC0105_SourceCode_V2.0.0

Note: All projects are built around keil 5. If users want to use them in other compiling environments, please refer to BSP_V2.x.x\project\xxx\templates (such as IAR6/7/8, keil 4/5) for a simple change.

1.3 Example of application

- 1) Open the SC0105_SourceCode_V2.0.0\utilities\otg1_host_otg2_device_demo project and download to the evaluation board. The OTG1_HOST interface can be connected to mouse, keyboard and other devices, and key actions of mouse and keyboard can be print by serial port assistant.
- 2) The OTG2 interface can be connected to PC, and the PC device manager displays a HID device. Refer to AN0097 for more details.

2 Revision history

Table 1. Document revision history

Date	Version	Revision note
2022.11.02	2.0.0	Initial release.

IMPORTANT NOTICE – PLEASE READ CAREFULLY

Purchasers are solely responsible for the selection and use of ARTERY's products and services, and ARTERY assumes no liability whatsoever relating to the choice, selection or use of the ARTERY products and services described herein.

No license, express or implied, to any intellectual property rights is granted under this document. If any part of this document deals with any third party products or services, it shall not be deemed a license grant by ARTERY for the use of such third party products or services, or any intellectual property contained therein, or considered as a warranty regarding the use in any manner whatsoever of such third party products or services or any intellectual property contained therein.

Unless otherwise specified in ARTERY's terms and conditions of sale, ARTERY provides no warranties, express or implied, regarding the use and/or sale of ARTERY products, including but not limited to any implied warranties of merchantability, fitness for a particular purpose (and their equivalents under the laws of any jurisdiction), or infringement of any patent, copyright or other intellectual property right.

Purchasers hereby agrees that ARTERY's products are not designed or authorized for use in: (A) any application with special requirements of safety such as life support and active implantable device, or system with functional safety requirements; (B) any air craft application; (C) any automotive application or environment; (D) any space application or environment, and/or (E) any weapon application. Purchasers' unauthorized use of them in the aforementioned applications, even if with a written notice, is solely at purchasers' risk, and is solely responsible for meeting all legal and regulatory requirement in such use.

Resale of ARTERY products with provisions different from the statements and/or technical features stated in this document shall immediately void any warranty grant by ARTERY for ARTERY products or services described herein and shall not create or expand in any manner whatsoever, any liability of ARTERY.