

# Intel® Atom™ Processor E3800

## GPIO Driver Release Notes

---

### 1. Driver Information

This is the main GPIO driver for the Bay Trail B0/B1/B2/B3 platform.

- Driver name  
    iaiogpio.sys  
    “Intel(R) Atom(TM) Processor GPIO Controller” in device manager list
- Version  
    603.9600.1948.30590
- Release Date  
    01/22/2014
- List of files in the driver package  
    iaiogpioe.inf  
    iaiogpioe.sys  
    IOTG\_BYT\_GPIO\_Driver\_Release\_Note.pdf

### 2. System Requirement

- IOTG Validated Platform  
    Bay Trail-I Fab3 Rev3 (SKU: B3-I , B3-M, B3-D)  
    Windows\* 8 Enterprise 32 bit (9200)  
    Windows 8 Enterprise 64 bit (9200)  
    Windows Embedded Standard 8 32 bit (9200)  
    Windows Embedded Standard 8 64 bit (9200)
- Development Environment  
    Windows 7 64 bit  
    Visual Studio\* 2012 RC  
    MSBuild 4.0.30319.17626 (.NET 4.0 x64)  
    Windows Driver Kit 7.1.0  
    Perforce/TeamCity\*
- Dependency  
    N/A
- Constraint  
    N/A

### 3. Enabled New Features

- This driver is a completely new implementation for Bay Trail B0/B1/B2/B3
- Support GPIO direction setting, configure selected GPIO pin as input or output pin.
- Support GPIO read pin, read pin's level value when GPIO pin is configured as input pin.
- Support GPIO write pin, configure pin level to high or low when it is configured as output pin.

### 4. Disabled Features

- N/A

## 5. Fixed Issues

- N/A

## 6. Known Issues

Refer to platform user guide

## 7. Installation Guide

- IOTG Validation Driver Install
  1. Make sure the system enable the test-signing.
  2. Click dpinst.exe in driver package to install the drivers.
- IOTG Validation Driver Uninstall
  1. Uninstall the driver from Control Panel\All Control Panel Items\Programs and Features.
- Windows Driver Update
  - Open “Device Manager”
    - Right click on “System Devices\ Intel(R) Atom(TM) Processor GPIO Controller”
  - Or if GPIO doesn’t exist, find the “Other Devices\Unknown Devices” with Resources\Memory Range=0xFED0Cxxxxx,0xFED0Dxxxxx, 0xFED0Exxxxx,and/or hardware ID=ACPI\INT33FC,there are 3 INT33FC devices, you should install the same driver on all these 3 unknown devices with hardware ID INT33FC
  - Choose “Update Driver Software” – “Browse my computer for driver software” – “Let me pick from a list of device drivers” – “Have Disk” then go to the GPIO driver folder to install the driver

**Note:** If possible, check the time stamp of the driver in the target to make sure the right binaries are used.

INFORMATION IN THIS DOCUMENT IS PROVIDED IN CONNECTION WITH INTEL PRODUCTS. NO LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE, TO ANY INTELLECTUAL PROPERTY RIGHTS IS GRANTED BY THIS DOCUMENT. EXCEPT AS PROVIDED IN INTEL'S TERMS AND CONDITIONS OF SALE FOR SUCH PRODUCTS, INTEL ASSUMES NO LIABILITY WHATSOEVER AND INTEL DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY, RELATING TO SALE AND/OR USE OF INTEL PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT.

A "Mission Critical Application" is any application in which failure of the Intel Product could result, directly or indirectly, in personal injury or death. SHOULD YOU PURCHASE OR USE INTEL'S PRODUCTS FOR ANY SUCH MISSION CRITICAL APPLICATION, YOU SHALL INDEMNIFY AND HOLD INTEL AND ITS SUBSIDIARIES, SUBCONTRACTORS AND AFFILIATES, AND THE DIRECTORS, OFFICERS, AND EMPLOYEES OF EACH, HARMLESS AGAINST ALL CLAIMS COSTS, DAMAGES, AND EXPENSES AND REASONABLE ATTORNEYS' FEES ARISING OUT OF, DIRECTLY OR INDIRECTLY, ANY CLAIM OF PRODUCT LIABILITY, PERSONAL INJURY, OR DEATH ARISING IN ANY WAY OUT OF SUCH MISSION CRITICAL APPLICATION, WHETHER OR NOT INTEL OR ITS SUBCONTRACTOR WAS NEGLIGENT IN THE DESIGN, MANUFACTURE, OR WARNING OF THE INTEL PRODUCT OR ANY OF ITS PARTS.

Intel may make changes to specifications and product descriptions at any time, without notice. Designers must not rely on the absence or characteristics of any features or instructions marked "reserved" or "undefined". Intel reserves these for future definition and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to them. The information here is subject to change without notice. Do not finalize a design with this information.

The products described in this document may contain design defects or errors known as errata which may cause the product to deviate from published specifications. Current characterized errata are available on request.

Contact your local Intel sales office or your distributor to obtain the latest specifications and before placing your product order.

Copies of documents which have an order number and are referenced in this document, or other Intel literature, may be obtained by calling 1-800-548-4725, or go to: <http://www.intel.com/design/literature.htm> Designers must not rely on the absence or characteristics of any features or instructions marked "reserved" or "undefined." Intel reserves these for future definition and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to them.

The Intel product may contain design defects or errors known as errata which may cause the product to deviate from published specifications. Current characterized errata are available on request.

Contact your local Intel sales office or your distributor to obtain the latest specifications and before placing your product order.

Intel and the Intel logo are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

\*Other names and brands may be claimed as the property of others.

Copyright © 2014, Intel Corporation. All rights reserved.