WriteIMEI User Guide

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About This Document

Purpose

This document describes how to write IMEI into phone.

Intended Audience

This document is intended for:

* Installation and commissioning engineer
* Technical support engineer

Organization

This document consists of five chapters as follows.

| Chapter | Describes |
| --- | --- |
| Overview | Introduce function, runtime environment, and so on. |
| Quick Start | Introduce basic operation of the tool. |
| Operation Guide | Introduce detail operation of the tool. |
| Configuration | Introduce some useful settings of the tool. |
| FQA | Answer and question. |

Conventions

* + - 1. Symbol Conventions

The symbols that may be found in this document are defined as follows.

| Symbol | Description |
| --- | --- |
| danger | Indicates a hazard with a high level of risk that, if not avoided, will result in death or serious injury. |
| wanning | Indicates a hazard with a medium or low level of risk which, if not avoided, could result in minor or moderate injury. |
| caution | Indicates a potentially hazardous situation that, if not avoided, could cause equipment damage, data loss, and performance degradation, or unexpected results. |
| **tip** | Indicates a tip that may help you solve a problem or save time. |
| **note** | Provides additional information to emphasize or supplement important points of the main text. |

* + - 1. Frequently Used Abbreviations

| Abbreviation | Description |
| --- | --- |
|  |  |
|  |  |
|  |  |
|  |  |

* + - 1. GUI Conventions

| Convention | Description |
| --- | --- |
| **Boldface** | Buttons, menus, parameters, tabs, windows, and dialog titles are in **boldface**. For example, click **OK**. |
| > | Multi-level menus are in **boldface** and separated by the ">" signs. For example, choose **File** > **Create** > **Folder**. |

* + - 1. Keyboard Operation

| Format | Description |
| --- | --- |
| **Key** | Press the key. For example, press **Enter** and press **Tab**. |
| **Key 1+Key 2** | Press the keys concurrently. For example, pressing **Ctrl+Alt+A** means the three keys should be pressed concurrently. |
| **Key 1**, **Key 2** | Press the keys in turn. For example, pressing **Alt**, **A** means the two keys should be pressed in turn. |

* + - 1. Mouse Operation

| Action | Description |
| --- | --- |
| Click | Select and release the primary mouse button without moving the pointer. |
| Double-click | Press the primary mouse button twice continuously and quickly without moving the pointer. |
| Drag | Press and hold the primary mouse button and move the pointer to a certain position. |

* + - 1. Reference

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# Overview

## Introduction

WriteIMEI is a tool that can be used to read and write IMEI, SN, Bluetooth Address and WIFI Address.

WriteIMEI also can check Software Version and AP Version of the phone.

WriteIMEI supports two modes to connect with phone, “Calibration Mode” and “Normal Mode”.

Calibration Mode: Connected phone to PC with USB cable which V-BUS is disconnected, and then powered on it for test.

Normal Mode: Powered on phone normally, and then connect to PC for test.

## Runtime environment

### Hardware

* + A phone that needs to test.
  + A normal USB cable

### Software

* + Microsoft Windows XP, Vista, Win7 or advanced operation system.

# Quick Start

## Main User Interface

Figure 2‑1 Main user interface

The major elements on the interface are described as follows:

* 1. **PORT** and **Mode Select**. If **Mode Select** is **Calibration Mode**, **PORT** must be USB. If **Mode Select** is **Normal Mode**, **PORT** must be COM(X).
* 2. **Set** Dialog. Some useful configuration can be set in this, please reference to [3.2 Set](#_Set).
* 3. Operation area. **Read** button is for reading IMEI/SN/BT/WIFI from the phone. **Write** button is for writing IMEI/SN/BT/WIFI to the phone. **Stop** button is for stopping reading or writing operation.
* 4. Test result statistics. **Yield** is pass ratio.
* 5. Prompt for testing. All test information will be displayed is this area.
* 6. Version display area. When you checked **Check Version** or **Check AP Version** in the **Set** dialog, the version information will be displayed in this area after reading from phone.
* 7. Test items. These items can be set in the **Set** dialog. They are maybe generated automatically by default, or generated by inputting manually.
* 8. Status for connecting. All connected status will be displayed in there.

Connect status:

Disconnect status: 

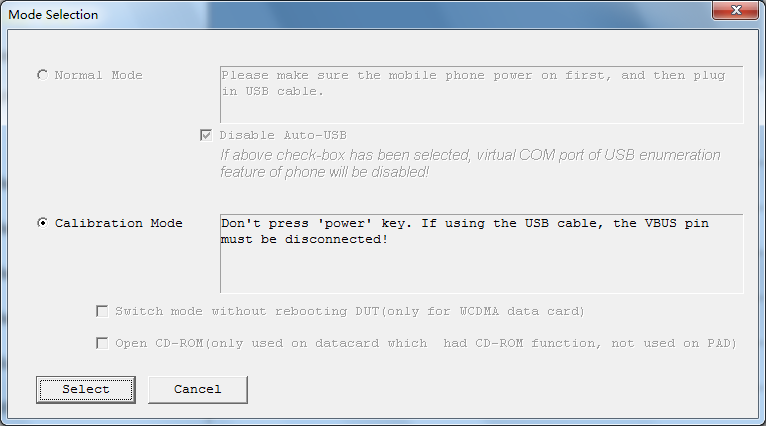
## Quick Operation

### Step by Step

Click “WriteIMEI.exe” to run the tool.

Select **Calibration Mode** in **Mode Select**, and then select **USB** in **PORT**.

Figure 2‑2 Mode Select dialog



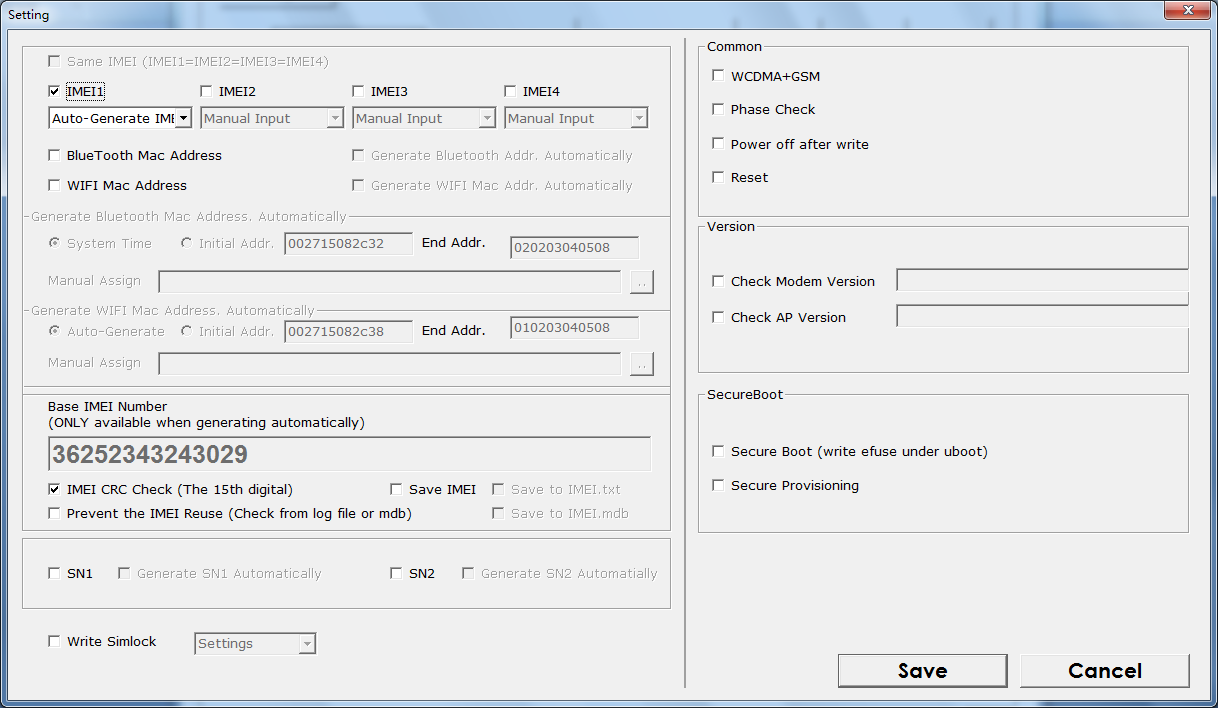
Click Set button to open setting dialog for some basic configuration.

Figure 2‑3 Set dialog

If you want to know more settings, please reference to[3.2 Set](#_Set).

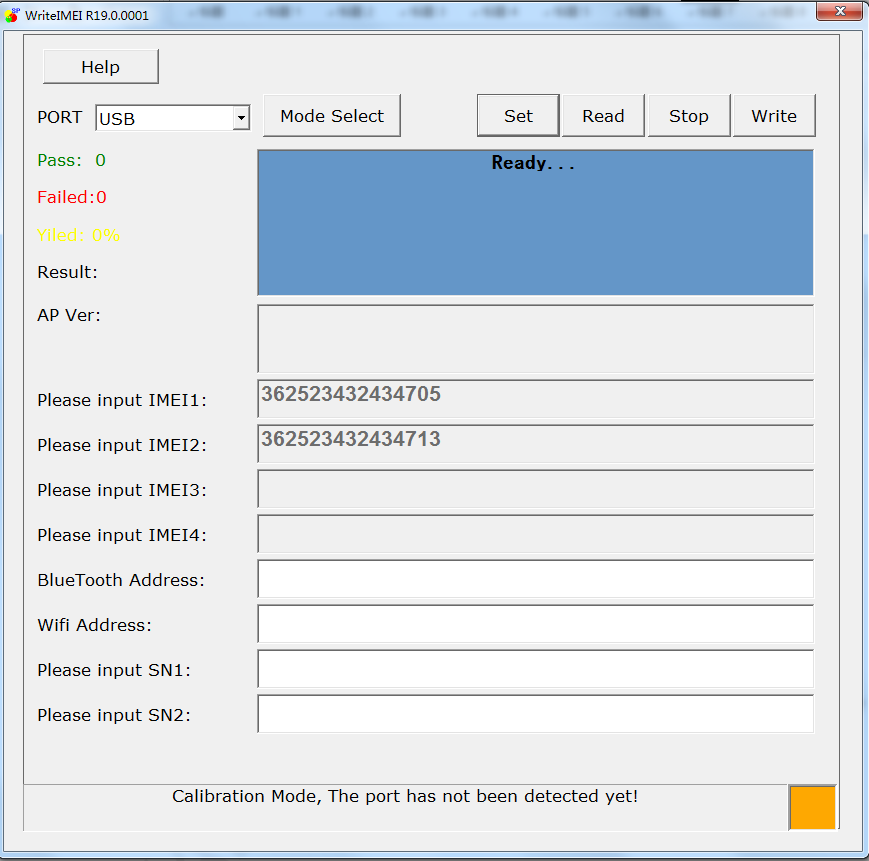
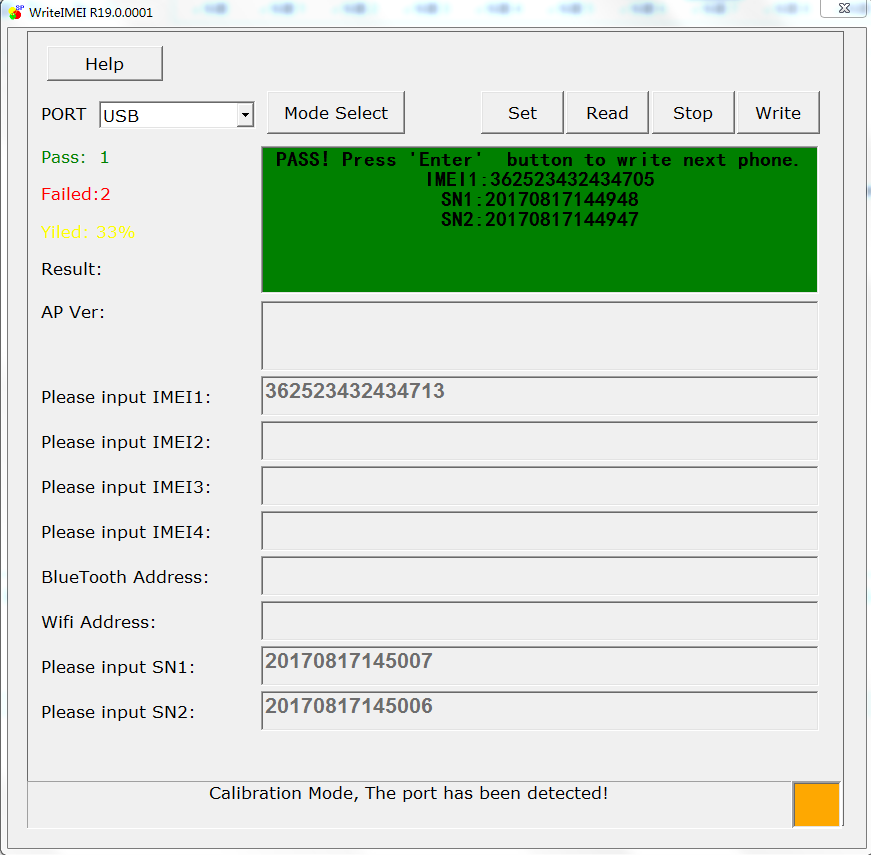
Input IMEI, SN , BT or WIFI, and then press **Write** button to write IMEI and other items to the phone.

Figure 2‑4 Ready to Write IMEI

Figure 2‑5 Test Result: Pass

Test finished.

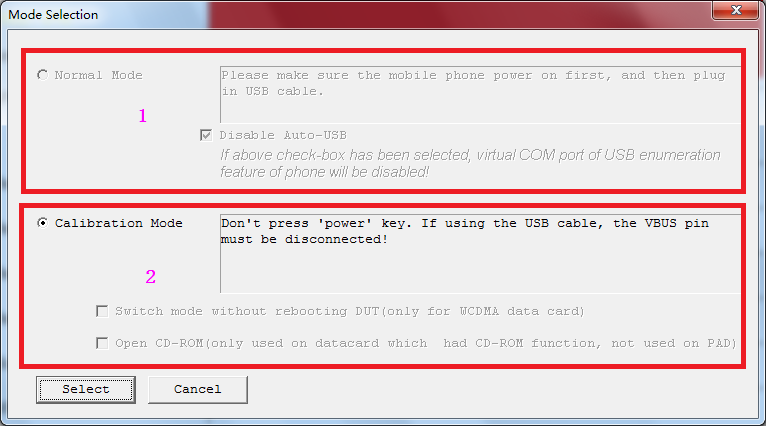
* tip

If you select **Calibration Mode**, you must first click **Read** or **Write** button, and then powered on the phone.

----End

# Operation Guide

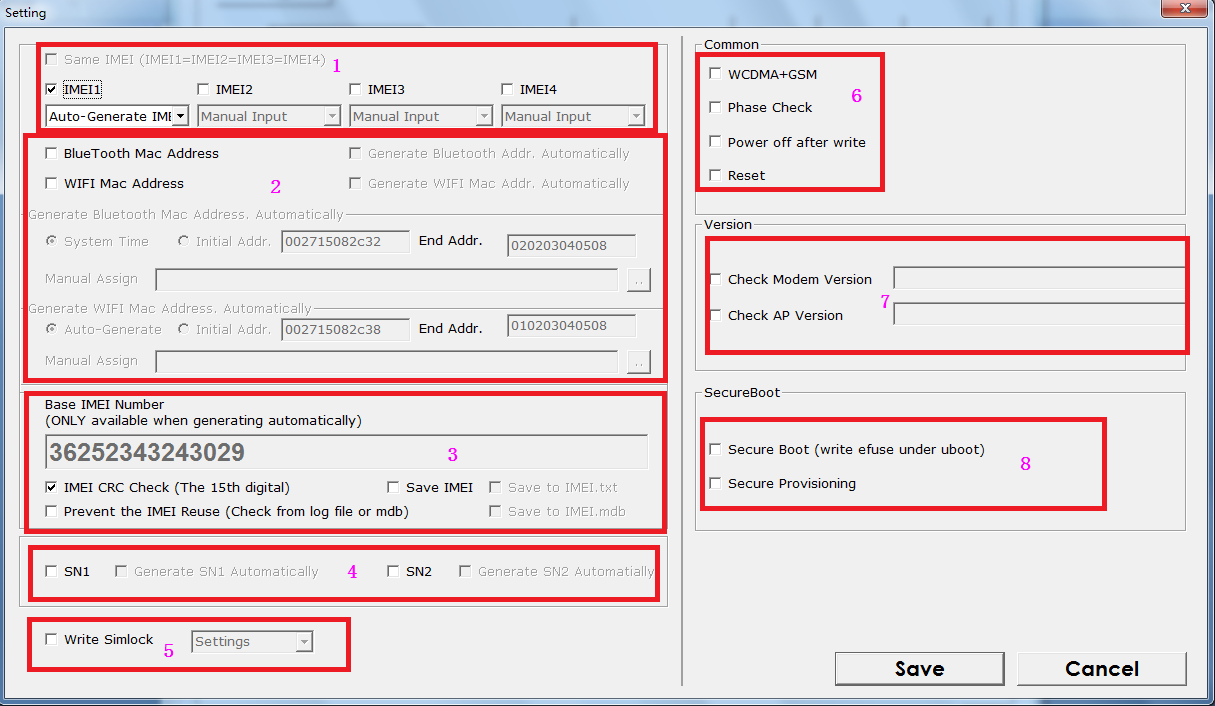
## Mode Select



* 1. **Normal Mode**. Not support yet.
* 2. **Calibration Mode**. In this mode, must to click **Read** or **Write** button at fist, and then powered on the phone. The V-BUS pin of the USB cable must be disconnected.

## Set

Figure 3‑1 Set Dialog



* 1. **Same IMEI**. When there are more than one IMEI to be written, this item will be enabled. It means IMEI1=IMEI2=IMEI3=IMEI4. For example, if IMEI1 = 36252343242096, then IMEI2=IMEI3=IMEI4= 36252343242096.

IMEI Generate Mode. There are two generate mode to select. **Manual Input**: generated by manually. **Auto-Generate IMEI**: generated by automatically.

* 2. Bluetooth and WIFI Generate Mode.

**BlueTooth Mac Address**:To writeBluetooth or not.

**Generate BlueTooth Addr**. **Automatically**: generate Bluetooth automatically or not.

**WIFI mac Address**: To write WIFI or not.

**Generate WIFI Mac Addr**. **Automatically**: generate WIFI automatically or not.

**Generate BlueTooth Mac Address. Automatically**: generate by **System Time** or **Initial Addr**.

**Generate WIFI Mac Address**. **Automatically**: generate by **Auto-Generate** or **Initial Addr**.

* 3. Related IMEI setting.

**Base IMEI Number**: Only available when generating IMEI automatically. For example, if **Base IMEI Number**=36252343242096, then IMEI=36252343242096X(X is generated by crc calculate ), IMEI2=36252343242097X, IMEI3=36252343242098X, IMEI4=36252343242099X.

**IMEI CRC Check (The 15th digital)**: Check IMEI for CRC.

**Save IMEI**: Save IMEI to txt file(**IMEI.txt**) or database(**IMEI.mdb**).

**Prevent the IMEI Reuse (Check from log file or mdb)**: When user input a IMEI, check if it has been exist in the txt file or database.

* 4. Related SN Setting.

**SN1**: If checked it, it means to write SN1 to the phone. Only this item is checked, the **Generate SN1 Automatically** item can be enabling.

**Generate SN1 Automatically**: If checked it, then will generate SN1 automatically, by manual input.

**SN2**: If checked it, it means to write SN2 to the phone. Only this item is checked, the **Generate SN2 Automatically** item can be enabling.

**Generate SN2Automatically**: If checked it, then will generate SN2 automatically, by manual input.

* 5. Write simlock or not.
* 6.Common Setting.

**WCDMA+GSM:** Enter WCDMA+GSM Mode.

**PhaseCheck:** Phase check or not.

**Power Off after write:** If checked it, it will send the command to the phone make the phone powered off after write all items.

**Reset:** If checked it, factory reset after write all items.

* 7. Check SW version and AP version.

**Check Version**: If checked it and inputted the key words in the edit, then will check the key words with the software version read from the phone.

**Check AP Version**: If checked it and inputted the key words in the edit, then will check the key words with the AP version read from the phone.

* 8. **SecureBoot.**

**Secure Boot(write effuse under uboot):** Write effuse under uoot, and then enter calibration mode for other items.

**Secure Provisioning:** Security deployment plan, need to connect server first.

# Configuration

## WriteIMEI.ini

WriteIMEI.ini configures the common settings, such as UART port, instrument, cable loss…etc. As most of the settings could be configured by UI directly, we only describe the useful items which should be configures by manually:

**[General]**  
Timeout =30000

WriteTimeCheck =0

WriteTime =20000

WaitForAPTime =7

CheckStationName =CFT

CurrentStationName =IMEI

**Timeout**: Specifies the wait time after DUT is under calibration mode. (Only available while calibration mode).

**WriteTimeCheck**: When write items to the phone, if needs to check timeout. 0: no; 1: yes.

**WriteTime**: The time that needs to check when write items to the phone.

**WaitForApTime:** Sleep **WaitForApTime** time and then to read AP version.

**CheckStationName:** The station needs to be checked.

**CuurentStationName:** Current station name, maybe IMEI by default.

**[Control]**  
User Privilege =1

Language =1

**User Privilege**: 0: Operator; 1: Admin.

**Language**: 0: Chinese; 1: English.

**[DCSOURCE]**UseDCS =0

DCType =2

DCGpibNo =0

DCGpibAddr =5

TestCounts =1

**UseDCS**: Use PowerSupply.

**DCType**: Specifies the type of PowerSupply：0---Keithley[230X]; 1---Keithley[2304]; 2---Agilent[663XX]; 3---Agilent[E36XX].

**DCGpibNo**: Card number of GPIB.

**DCGpibAddr**: Specifies the address of GPIB.

**TestCounts**: Specifies the count of loop test.

# FQA

###### 

###### Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| Version | Date | Owner | Notes |
| 1.0.0 | 2013-02-01 | Teana.Hu | Created |
| 1.0.1 | 2014-10-24 | Teana.Hu | Modify Set dialog |
| 1.0.2 | 2017-08-11 | Teana.Hu | Updated |
|  |  |  |  |
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|  |  |  |  |