



GoDroid

Application Notes Standby Configuration

v1.1



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Preface

Overview

This manual design to illustrate Standby and Shutdown flow and also its related configuration of GoDroid software development kit. This manual is organized into the following chapters:

- **Chapter 1: GoDroid Standby:**

This chapter provides information on GoDroid Standby, Shutdown flow and also the Standby modes.

- **Chapter 2: PMU Standby Configuration**

This chapter gives a general overview on PMU Standby configuration.

- **Chapter 3: FAST Standby Configuration**

This chapter describes range of common questions and their corresponding solutions related to the configuration of FAST Standby mode.

Audience

This manual is primarily written to provide complete guidance for those who wants to exploit GoWarrior TIGER Board, such as makers, tinkers, innovators, students, etc.

Applicable Products

This manual is applicable for the GoWarrior TIGER Board.

Reference Documents

N/A

Conventions

Typographical Conventions

Item	Format
codes, keyboard input commands, file names, equations, and math	<code>Courier New, Size 10.5</code>
Variables, code variables, and code comments	<i>Courier New, Size, Italic</i>
Menu item, buttons, tool names	Ebrima, Size 10.5, Bold e.g. Select USB Debugging
Screens, windows, dialog boxes, and tabs	Ebrima, Size 10.5, Bold Enclosed in double quotation marks e.g. Open the “Debug Configuration” dialog box

Table 1. Typographical Conventions

Symbol Conventions




Item	Description
 <i>Caution</i>	Indicates a potential hazard or unsafe practice that, if not avoided, could result in data loss, device performance degradation, or other unpredictable results.
 <i>Note</i>	Indicates additional and supplemental information for the main contents.
 <i>Tip</i>	Indicates a suggestion that may help you solve a problem or save your time.

Table 2. Symbol Conventions

How to Contact Us

Submit all your comments and error reports to the author at:

info@gowarriorosh.com

Tel: +886-2-8752-2000

Fax: +886-2-8751-1001

For questions regarding GoWarrior, contact our support team at the email listed below:

support@gowarriorosh.com

1 GoDroid Standby

GoDroid v1.1 supports PMU Standby and Fast Standby modes.

PMU Standby and Fast Standby have different requirements on board circuit. TIGER Board can support both modes. For the board circuit design, please refer to "[TIGER Board System Reference Manual](#)".

1.1 GoDroid Standby and Shutdown

GoDroid standby and shutdown, both are Android native process. GoDroid interface needs to be called only when the Standby mode is really accessible.

- **Standby process:** Press the power button, and the system will enters in the Standby mode.
- **Shutdown process:** The dialog box will pop up by keep pressing the power button. Here users can select option to shut down the system. The system will shut down once the Shutdown option is selected.

2 PMU Standby Configuration

PMU Standby mode saves enormous amount of power, because only the front platform has power supply, while CPU, DDR or other components have no power supply. However, in case of reboot, the whole system will be rebooted from U-Boot. This is quite similar to cold boot, but it will take relatively a longer time.

To use PMU Standby, corresponding configurations need to be made for both the standby and shutdown processes.

1. Standby

Please open the macro definition in

`/system/core/libsuspend/autosuspend_wakeup_count.c` as below:

```
#define ALI_PMU_STANDBY
```

2. Shutdown

Please open the macro definition in

`/system/core/libcutils/android_reboot.c` as below:

```
#define ALI_PMU_STANDBY
```

3 FAST Standby Configuration

As in Fast Standby mode only partial components of the device will be inactive, while CPU and DDR will still have power supply. This mode consumes higher power dissipation comparatively with PMU Standby mode.

However, it is faster to exit standby mode, because there is no need to reboot all from U-Boot, and CPU can continue to run from the breakpoint.

Appendix: Glossary

Abbr.	Full Name
PMU	Power Management Unit

Table 3. List of Abbreviations

Revision History

Document Change History

Revision	Changes	Date
v1.1	Updated document version to 1.1.	February 29, 2016
v1.0	Initial Release	September 07, 2015

Table 4. Document Change History

Software Changes

Revision	Changes	Date
v1.1	Install and start GoDroid with a MicroSD card.	February 29, 2016
v1.0	Initial Release	September 07, 2015

Table 5. Software Change History



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