



GoDroid

GoDroid Installation

v1.1



Copyright Statement

Copyright in this document is owned by GoWarrior Community. Any person is hereby authorized to view, copy, print and distribute this document subject to the following conditions:

- The document may be used for informational purposes only
- The document may be used for non-commercial purposes only
- Any copy of this document or portion thereof must include this copyright notice

This document is provided "as is" without any warranty of any kind, either express or implied, statutory or otherwise; without limiting the foregoing, the warranties of satisfactory quality, fitness for a particular purpose or non-infringement are expressly excluded and under no circumstances will GoWarrior Community be liable for direct or indirect loss or damage of any kind, including loss of profit, revenue, goodwill or anticipated savings.

This document is intended only to assist the reader in the use of the product. GoWarrior Community makes no representations or warranties with respect to the accuracy or completeness of the contents of this document, which is used at your own risk and should not be relied upon. The information could include technical inaccuracies or typographical errors. No license, whether express, implied, arising by estoppel or otherwise, to any intellectual property right is granted by this document.

The product described in this document is subject to continuous development and improvements. GoWarrior Community also reserves the right to make changes to the specifications and product description at any time without notice.

Third-party brands and names mentioned in this publication are for identification purpose only and may be the property of their respective owners.

Android™ is a registered trademark of Google Inc. Linux® is a registered trademark of Linus Torvalds. Microsoft® and Windows® are registered trademarks of Microsoft Corporation. Supply of this product does not convey a license nor imply a right under any patent, or any other industrial or intellectual property right of Google Inc., Linus Torvalds, and Microsoft Corporation to use this implementation in any finished end-user or ready-to-use final product. It is hereby notified that a license for such use is required from Google Inc., Linus Torvalds and Microsoft Corporation.

For the latest version of this document refer to:

www.gowarriorosh.com

Copyright © 2016 GoWarrior Community All Rights Reserved.

Table of Contents

Preface	1
Overview	1
Audience	1
Applicable Products.....	1
Reference Documents.....	1
Conventions.....	2
How to Contact Us.....	3
1 Installation Overview.....	4
2 Installing GoDroid	5
2.1 What You Will Need	5
2.2 Installation Procedure	5
2.3 Setting MAC Address	9
Appendix: Glossary	11
Revision History	12
Document Change History.....	12
Software Changes.....	12

List of Tables

Table 1. Typographical Conventions.....	2
Table 2. Symbol Conventions	2
Table 3. Hardware Preparation.....	5
Table 4. List of Abbreviations.....	11
Table 5. Document Change History	12
Table 6. Software Change History.....	12

List of Figures

Figure 1. Image File Structure.....	6
Figure 2 Selecting Source.....	7
Figure 3 Clicking Install	8
Figure 4 Changing MAC Address.....	9
Figure 5 Setting New MAC Address.....	10
Figure 6 Rebooting System	10

Preface

Overview

This manual provides detailed guidance about how to install GoDroid system on TIGER Board. This manual is organized into the following chapters:

- **Chapter 1: Installation Overview**

This chapter provides overview about the GoDroid installation.

- **Chapter 2: Installing GoDroid**

This chapter provides the procedure of installing GoDroid.

Audience

This manual is applicable for the users who wish to learn how to install GoDroid.

Applicable Products

This manual is applicable for the GoWarrior TIGER Board.

Reference Documents

- Getting Started with GoDroid

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 Installation Overview

TIGER Board comes out of the box with GoDroid pre-installed, you can start GoDroid directly just by powering up the board.

To update GoDroid to the latest version, or if you have customized GoDroid, you can install the system with the image file using a MicroSD card.

Please download the image files form the website:

http://www.gowarriorosh.com/wp/en_US/download/

GoDroid supports two methods of installation:

1. Installing to on-board NAND Flash

GoDroid is installed to the on-board NAND Flash, and will boot up automatically after the board is powered up.

2. Installing to an extra MicroSD card

GoDroid is installed to an extra MicroSD card, and will boot up when the board is powered up with the card plugged in.

2 Installing GoDroid

Installing GoDroid is not a difficult task; you can accomplish the installation in minutes.

2.1 What You Will Need

Before installation, prepare the power supply for the board, a PC and a MicroSD card by the following table.

Hardware	Options	Description
Power supply	5V/2A power supply	Provides power supply through the 5V power Jack on the board.
	PC (with a Micro-USB cable)	Provides power supply by connecting to the board with a Micro-USB cable.
PC (with a MicroSD card reader, keyboard, mouse)	N/A	Handles GoDroid image file.
Display device	TV/Monitor (with an HDMI or AV Jack cable)	Supports HDMI or CVBS as input video source for GoDroid initial configuration.
MicroSD card	N/A	FAT32 format and less than 64 GB. Suggest to use the tested types of MicroSD card. in <i>"GoWarrior_TIGER Board_Peripherals_List_v1.1"</i>

Table 3. Hardware Preparation

2.2 Installation Procedure

Before starting to install GoDroid, ensure that you have prepared the necessary devices described in section 2.1.

2.2.1 Installing to NAND Flash

To install GoDroid to the on-board NAND Flash, perform the following steps:

1. Insert your MicroSD card to your PC. Download the image file (for NAND Flash) from the GoWarrior website: www.gowarriorosh.com, and unzip it. The unzipped files are shown as below:

```
sdboot
├── bootcode.abs
└── burn
    ├── ALI.ini
    ├── backup.abs
    ├── baseparams.abs
    ├── bootargs.abs
    ├── bootmedia.ubo
    ├── cache.img
    ├── deviceinfo.abs
    ├── kernel.ubo
    ├── NandList_v2.ran
    ├── recovery.ubo
    ├── sdram_C3921_BG4462_1GB_1600MTps.abs
    ├── system.img
    ├── uboot_unify_1GB_training.abs
    └── userdata.img
```

Figure 1. Image File Structure

2. Copy the `bootcode.abs` file and `burn` folder to the root directory of your MicroSD card.
3. Switch the **Boot Switch** button to **MicroSD Boot**.
4. Plug in your MicroSD card, connect your display device to the board, and power on the board with your power supply, the installation starts.
5. After the installation is complete, power off the board.
6. Switch the **Boot Switch** button to **NAND Boot**.

2.2.2 Installing to MicroSD Card

You have options to install GoDroid to an extra MicroSD card with a Windows PC, a Linux PC or a Mac OS X.



Note:

*Before starting GoDroid in your MicroSD card, switch the **Boot Switch** button to **MicroSD Boot**.*

GoDroid in an SD card cannot enter and use the recovery mode.

Installing with a Windows PC

1. Download the image file (for SD card) from the GoWarrior website:
www.gowarriorosh.com
2. [Download](#) Fedora ARM Image Installer and install it to your PC.
3. Insert your MicroSD card to PC, and then launch the Installer.
4. In the Installer, click **Browse** to select the GoDroid image, and then click **Device** to select your MicroSD card.

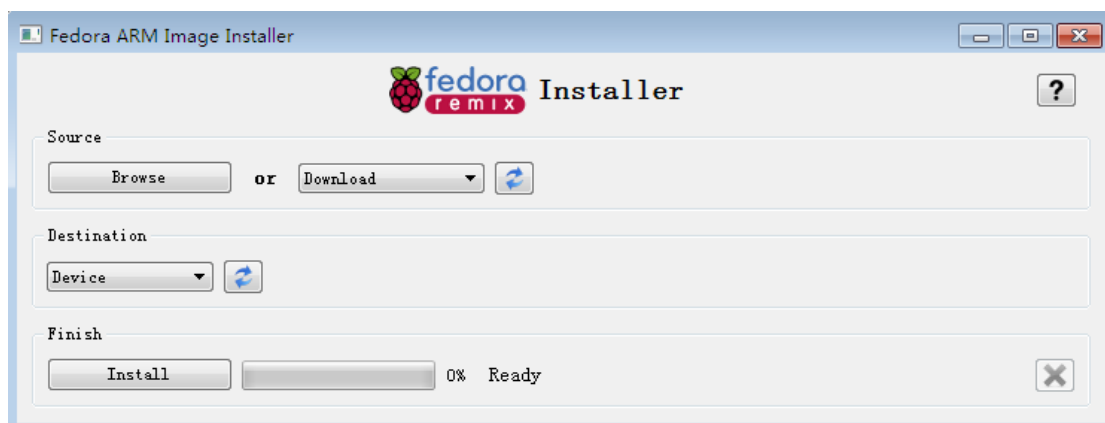


Figure 2 Selecting Source

5. Click **Install**.

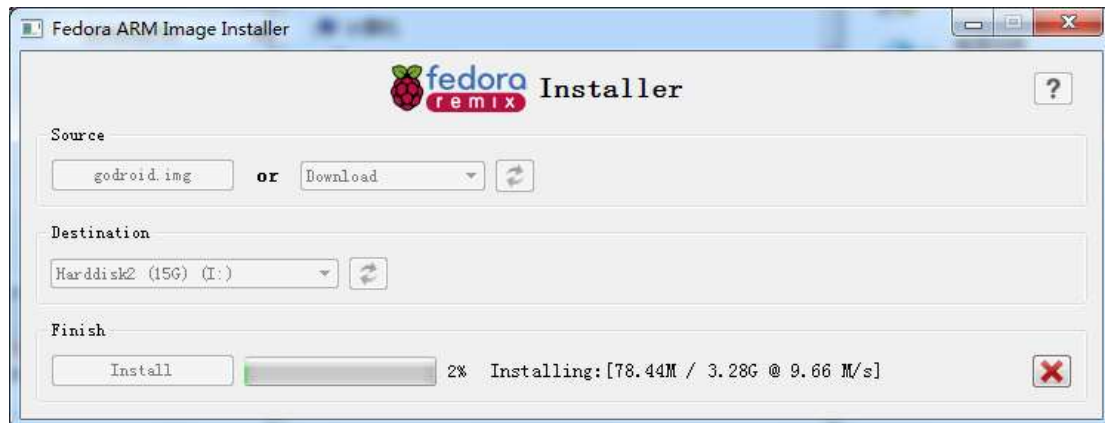


Figure 3 Clicking Install

Installing with a Linux PC

1. Insert your MicroSD card to PC.
2. Install GoDroid to the card.

For example, if your card is at `/dev/sdb1`, then execute the following command:

```
sudo ddrescue -d -D --force godroid.img /dev/sdb1
```

Installing with Mac OS X

1. Insert your MicroSD card to PC.
2. Unmount the MicroSD card.

For example, if your card is at `/dev/disk3s1` by device name, then execute the following command in Terminal utility:

```
sudo diskutil unmount /dev/disk3s1
```

3. Use the device name of the card to work out the raw device name by replacing disk with `rdisk` and omitting the `s1`.

For example, the raw device name for the device `/dev/disk3s1` is `/dev/rdisk3`.

4. Install GoDroid to the card.

For example, if your card is at `/dev/rdisk3` by the raw device name, then execute the following command:

```
sudo dd bs=1m if=~/.godroid.img of=/dev/rdisk3
```

2.3 Setting MAC Address

GoDroid starts automatically when you power on the board after installation. For more information about the first start of GoDroid, refer to [Getting Started with GoDroid](#). After the initial setup of GoDroid, perform the following steps to set the MAC address for the board:

Procedure:

1. Select **Settings** > **Ethernet configuration** > **LAN MAC address**, and then click **OK**.

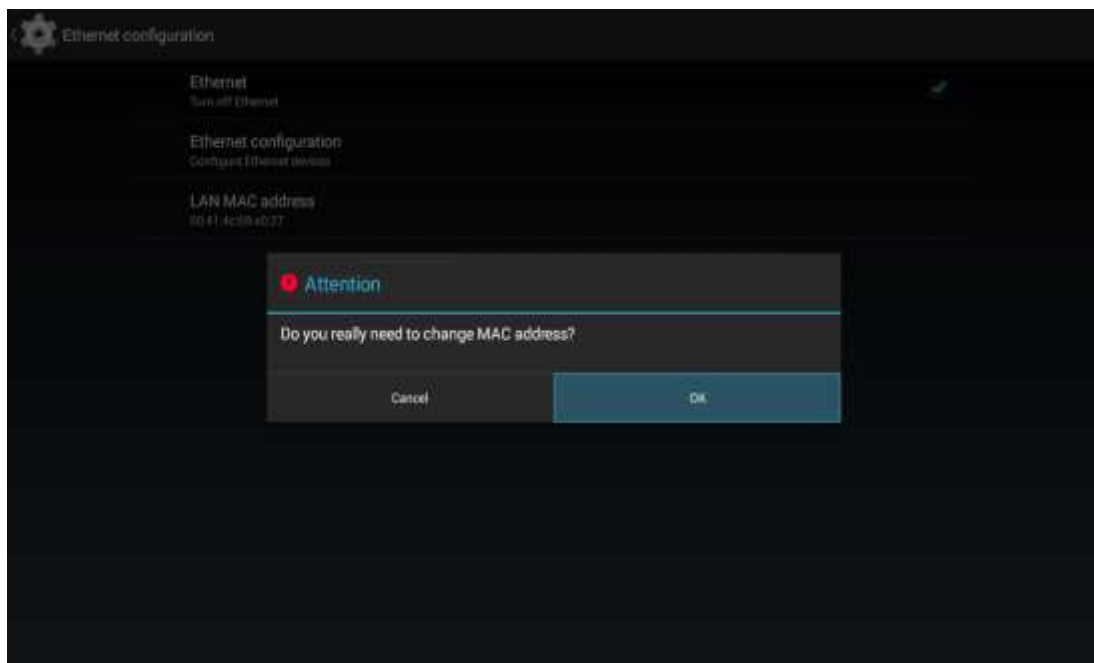


Figure 4 Changing MAC Address

2. Enter the new MAC address, and then click **Save**.
To get the MAC address, check the packing box of your TIGER Board.



Figure 5 Setting New MAC Address

3. Click **OK**.

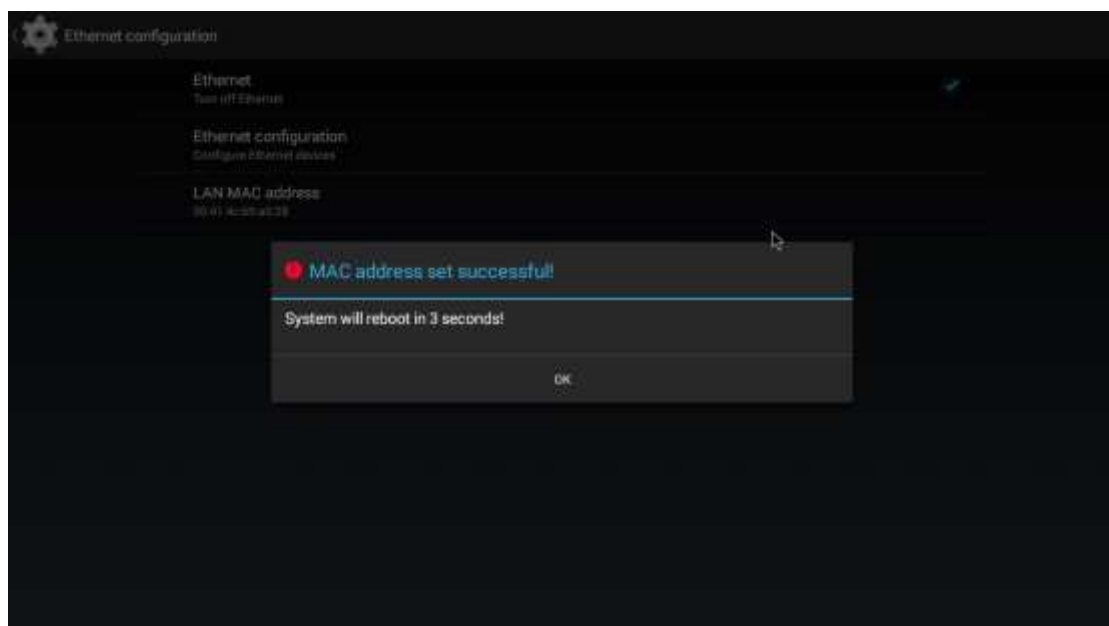


Figure 6 Rebooting System

Appendix: Glossary

Abbr.	Full Name
GoDroid	GoDroid is the integral Android-based operating system of GoWarrior platform.

Table 4. List of Abbreviations

Revision History

Document Change History

Revision	Changes	Date
V1.1	Updated for GoDroid 1.1 release.	February 29, 2016
v1.0	Initial Release	September 07, 2015

Table 5. 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 6. Software Change History



www.gowarriorsh.com

Headquarters

Tel: +886-2-8752-2000

Fax: +886-2-8751-1001

