

## Galaxy Tab 2 10.1 (P51xx) Installation

**Warning:** installing an operating system, such as Replicant, may void your device's warranty and will erase the data stored on the device.

### Prerequisites

In order to install Replicant on your device, it is assumed that you have a computer running a GNU/Linux operating system and everything necessary to connect your device to the computer through USB available. Moreover, it is assumed that anyone performing the installation knows how to use command lines in a terminal and has basic knowledge about it.

### Downloading the files

The first step in the installation process is to download and set up the files that will be used to install Replicant to the device. The files must be downloaded on your computer first.

1. Find out what the latest image is: check out the Last image part of the general table on [GalaxyTab2101P51xx](#)
2. Download **all** the files listed for the device (including the checksum and the signatures) on [ReplicantImages](#) for the latest image
2. Make sure you have added the [Replicant release key](#) to your GPG keyring
3. Check the signature of the files:

```
gpg --armor --verify path/to/replicant-4.2-p5100.zip.asc path/to/replicant-4.2-p5100.zip
```

or

```
gpg --armor --verify path/to/replicant-4.2-p5110.zip.asc path/to/replicant-4.2-p5110.zip
```

```
gpg --armor --verify path/to/recovery.img.asc path/to/recovery.img
```

4. Make sure the check succeeds, **do not install anything if it doesn't!**
5. Check the checksum of the files:

```
md5sum -c p5100.md5
```

or

```
md5sum -c p5110.md5
```

6. Make sure the check succeeds, **do not install anything if it doesn't!**

### Installing heimdall

The heimdall tool is required to flash the recovery image to the device.  
Instructions to install heimdall: [ToolsInstallation](#)

### Copying the files to the device

There are two means of pushing the system zip to the device:

- Using the storage of the device
- Using the ADB tool to perform sideload

#### Using the storage of the device

You can either complete this step by using the device's internal storage or by using an external microSD card.

#### Using the internal storage

1. Make sure the device is started up and has an Android system running
2. Connect the USB cable to both the computer and the device
3. Enable USB mass storage on the device
4. Mount the mass storage on the computer
5. Copy the replicant-4.2-p5100.zip or replicant-4.2-p5110.zip file at the origin of the mass storage
6. Safely unmount the mass storage on the computer
7. Disable USB mass storage on the device

### Using a microSD card

1. Connect the microSD card to the computer (e.g. using an USB card reader)
2. Mount the microSD card on the computer
3. Copy the replicant-4.2-p5100.zip or replicant-4.2-p5110.zip file at the origin of the microSD card
4. Safely unmount the microSD card on the computer
5. Disconnect the microSD card from the computer
6. Insert the microSD card in the device (make sure it is turned off before inserting the card)

### Installing ADB

Instructions to install ADB: [ToolsInstallation](#)

## Preparing the device

The next step in the installation process is to prepare the device for heimdall mode.

1. Make sure the device is completely turned off and the USB cable is disconnected from the device
2. Start the device by holding the following key combination: **Volume up, Power**
3. Hold the key combination until the device shows a **Warning** message
4. Confirm that you want to download a custom OS (using volume up)
5. Make sure the device is in **Downloading** mode
4. Connect the USB cable to both the computer and the device

## Installing the images

Now that both the computer and the device are set up, it is time to actually install the images to the device.

1. Install the recovery image to the device:

```
heimdall flash --KERNEL path/to/recovery.img --RECOVERY path/to/recovery.img
```

2. Make sure the device reboots to recovery
3. Select **install zip** (using the volume keys to navigate and the power key to select)

## Using the storage of the device

### Using the internal storage

4. Select **install zip from sdcard**
5. Select the system zip: **replicant-4.2-p5100.zip** or **replicant-4.2-p5110.zip**  
Note: if your device was running Android 4.2 and later, it may be located in the **0** directory
6. Confirm the installation

### Using a microSD card

4. Select **install zip from external sdcard**
5. Select the system zip: **replicant-4.2-p5100.zip** or **replicant-4.2-p5110.zip**  
Note: if your device was running Android 4.2 and later, it may be located in the **0** directory
6. Confirm the installation

## Using ADB sideload

4. Select **install zip from sideload**
5. Back to the host computer, load the system zip with sideload:

```
adb sideload path/to/replicant-4.2-p5100.zip
```

or

```
adb sideload path/to/replicant-4.2-p5110.zip
```

6. Make sure the file is being transferred

## Completing the installation

8. Select **Go Back** (if necessary) to get back to the general menu

8. Select **wipe data/factory reset**

9. Confirm the data wipe by selecting **Yes -- delete all user data**

10. Select **Reboot system now** to reboot the device

**Your device should now be running Replicant!**