

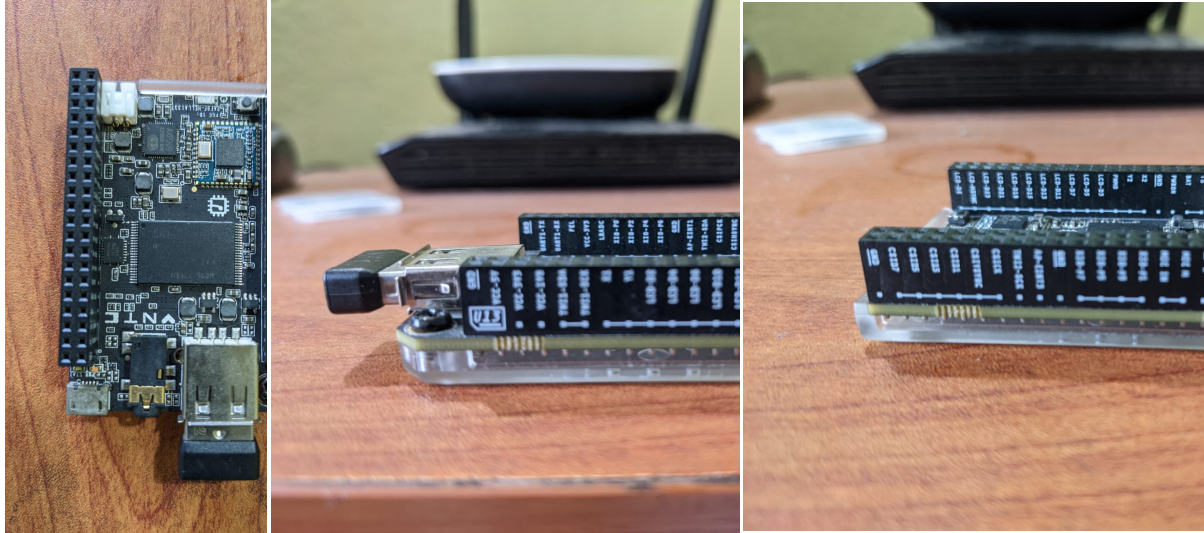
Flashing the C-H-I-P V1.0 (Reinstall/unbrick/factory reset) on OS Ubuntu 20.04.3 LTS (Focal Fossa)

5 years back Radolfo M Garza gave me Teensy LC for his project. There was another things in his box it was a gift for me along with Teensy LC.

When I asked him what is it he told me that it is chip. Unfortunately it was not used by be as not required so it was just kept in proper packaging.

In the mean time 5 yeas past and I tried to find what it is ... after some effort I was surprised to know it is C-H-I-P V1.0 from **Next Thing Co.** the world smallest single board computer. Its discontinued right now.

[https://en.wikipedia.org/wiki/CHIP_\(computer\)](https://en.wikipedia.org/wiki/CHIP_(computer))



Now I tried to boot it using my LCD Tv and and Mobile charger. I used 3.5 mm Stereo Male to 3 RCA Male Heavy Quality Material Audio Video AV Cable.



But Nothing Happens.

After some study I am glad to know its bricked. And I have to flashing the chip (Reinstall/unbrick/factory reset).

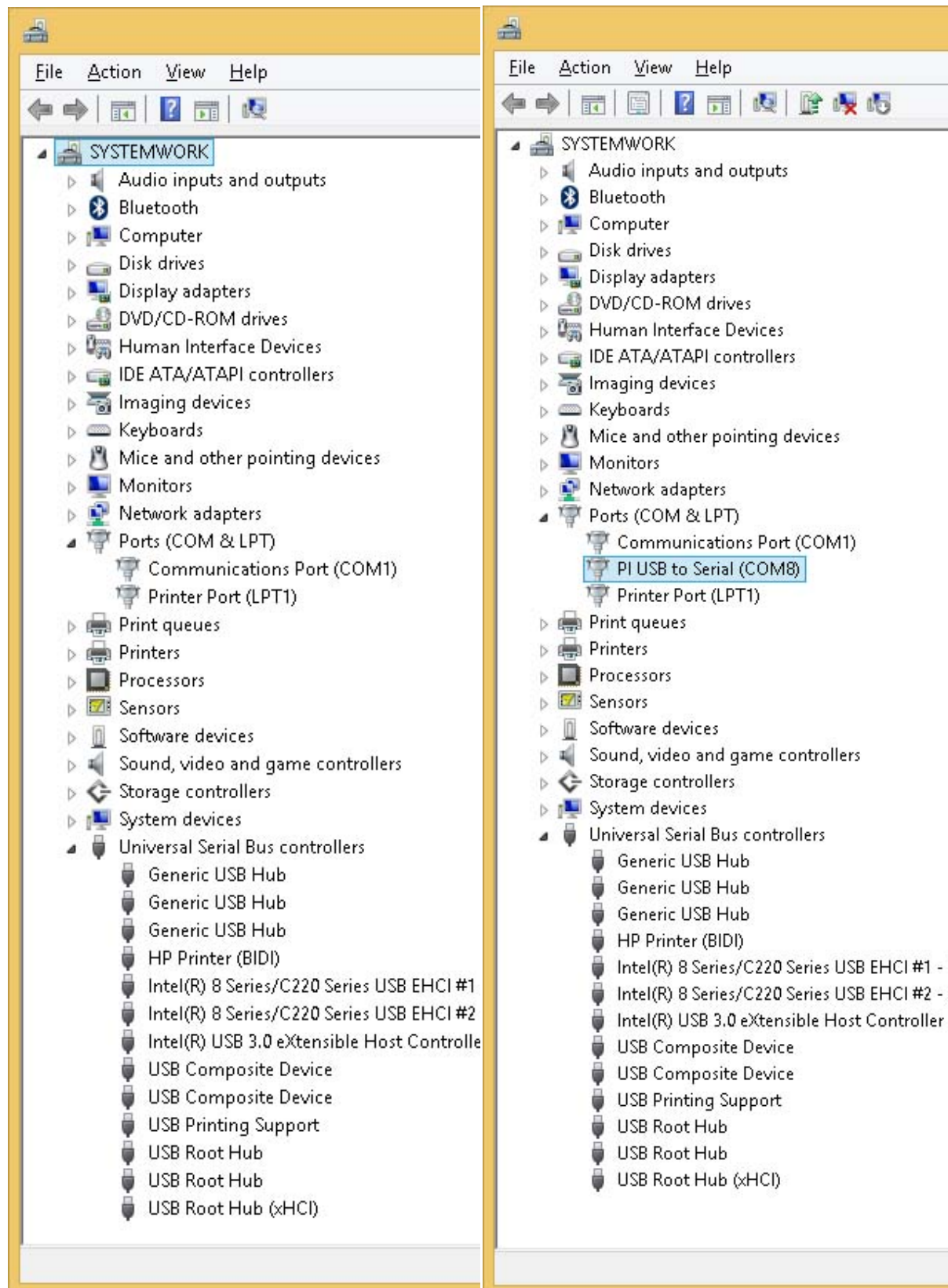
Now I started trying first with windows OS. got some tutorial video

<https://www.youtube.com/watch?v=OD5NIIjm24w>

But where is chip-boot-repair.exe ?? There was no web flasher... felling very bad.

But i got some file in <https://archive.org/details/C.h.i.p.FlashCollection> Official **Next Thing Co.** site was down. **Next Thing Co. was an Oakland, California based start-up company founded in 2013 by Dave Rauchwerk, Gustavo Huber and Thomas Deckert.**

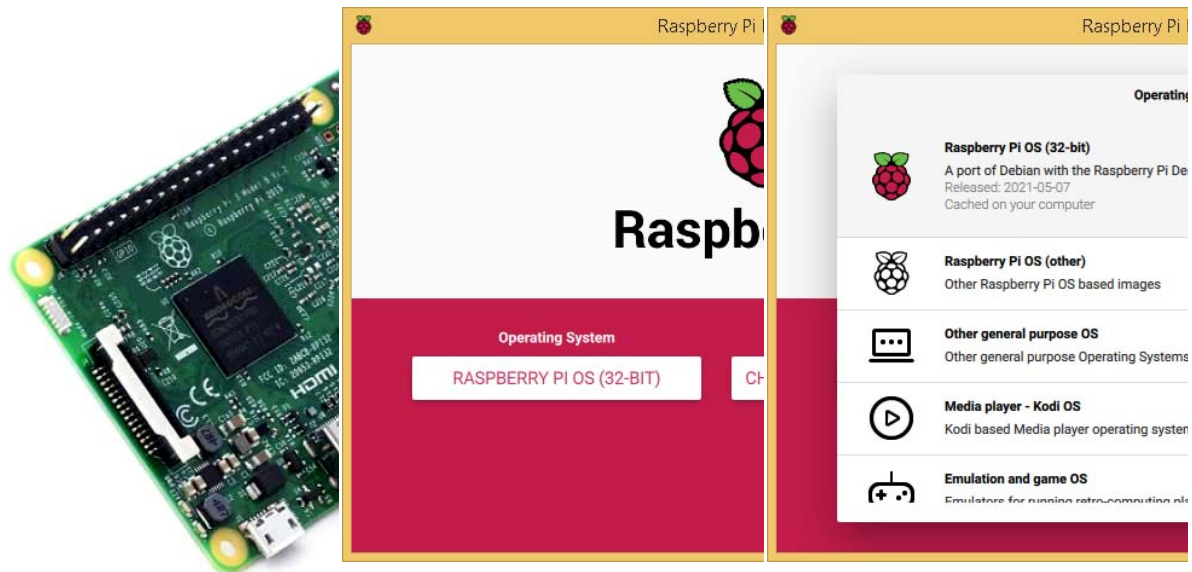
Finally I got a windows driver for Flashing <https://archive.org/details/chip-flashing-mode-driver> but I think it will works with web flasher so my work still pending. The file I downloaded is [InstallDriver2](#). After installing it windows(Windows 8.1 build 9600) able to recognised C-H-I-P. The following image is after flashing but after installing above diver windows shows the device in flashing mode.



I am familiar with windows not unix or linux so in order to flash I need a linux system. Took my Raspberry PI

Raspberry PI Model B very low specs. Its over heat quickly and low power symbol shows always when I connect it to CAM. Unfortunately a project was running on Raspberry PI.I used [Raspberry PI Imagers](#) for installing

I have little knowledge on Raspberry PI. 3-4 years back in order to write an algorithm for Tara Gallagher I installed Open CV on it. Raspberry PI have OS Linux Debian Based so I think it will works but due to some error as mentioned before I leave it.



But I got some resources for flashing.

https://www.youtube.com/watch?v=qAuqW4t_pO4&t=197s

Now I picked Ubuntu 20.4, Took Seagate 1 TB. external HDD. Plug it to my windows system and installed Ubuntu 20.4. Then finally able to flash.

In order to install Ubuntu 20.04.3 LTS (Focal Fossa) I took a 16 GB micro SD card Toshiba for image. And Seagate Expansion 1 TB External HDD - USB 3.0 for PC , Portable Hard Drive (STEA1000400). Now downloaded [PowerISO8-x64](#) and [rufus-3.15](#) for creating boot image ubuntu-20.04.3-desktop-amd64.iso. Installed Ubuntu 20.04.3 LTS from that image to external HDD after what GNU GRUB picked my Windows 8.1 Pro build 9600 and gave me option for dual booting.

Output of Flashing:

```
systemwork@ansuman-SYSTEMWORK:~/Flash-CHIP$ ./Flash.sh
# # #
#####
###  ###
# {#} #
### ^#####
# #
###  ###
#####
# # #
Welcome to the C.H.I.P Flasher Tool
Please enter your wanted flavour
+++++
enter p for pocketchip Image
enter s for the headless Server Image
enter g for the Desktop Image
enter b for the Buildroot Image
+++++
IMPORTANT INFO
If u suffer from Power Problems add a n
to your choice of flavour
Example: gn for the No-Limit Desktop Image
+++++
Other options
+++++
enter f for Force Clean
+++++
Then press enter please
g

Setting up environment
Hit:1 http://in.archive.ubuntu.com/ubuntu focal InRelease
Get:2 http://in.archive.ubuntu.com/ubuntu focal-updates InRelease [114 kB]
Get:3 http://in.archive.ubuntu.com/ubuntu focal-backports InRelease [101 kB]
Get:4 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 Packages [1,205 kB]
Get:5 http://security.ubuntu.com/ubuntu focal-security InRelease [114 kB]
Get:6 http://in.archive.ubuntu.com/ubuntu focal-updates/main i386 Packages [532 kB]
Get:7 http://in.archive.ubuntu.com/ubuntu focal-updates/main Translation-en [258 kB]
Get:8 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 DEP-11 Metadata [282 kB]
Ign:9 http://archive.ubuntu.com/ubuntu artful InRelease
Get:10 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 c-n-f Metadata [14.1 kB]
Get:11 http://in.archive.ubuntu.com/ubuntu focal-updates/universe amd64 Packages [855 kB]
Get:12 http://in.archive.ubuntu.com/ubuntu focal-updates/universe i386 Packages [632 kB]
Get:13 http://in.archive.ubuntu.com/ubuntu focal-updates/universe Translation-en [181 kB]
Get:14 http://in.archive.ubuntu.com/ubuntu focal-updates/universe amd64 DEP-11 Metadata [351 kB]
```

```
Err:15 http://archive.ubuntu.com/ubuntu artful Release
404 Not Found [IP: 91.189.88.152 80]
Get:16 http://in.archive.ubuntu.com/ubuntu focal-updates/universe
amd64 c-n-f Metadata [18.8 kB]
Get:17 http://in.archive.ubuntu.com/ubuntu focal-updates/multiverse
amd64 DEP-11 Metadata [944 B]
Get:18 http://in.archive.ubuntu.com/ubuntu focal-backports/universe
amd64 DEP-11 Metadata [10.3 kB]
Reading package lists... Done
E: The repository 'http://archive.ubuntu.com/ubuntu artful Release'
does not have a Release file.
N: Updating from such a repository can't be done securely, and is
therefore disabled by default.
N: See apt-secure(8) manpage for repository creation and user
configuration details.
Reading package lists... Done
Building dependency tree
Reading state information... Done
wget is already the newest version (1.20.3-1ubuntu1).
wget set to manually installed.
adb is already the newest version (1:8.1.0+r23-5ubuntu2).
adb set to manually installed.
android-tools-fastboot is already the newest version (1:8.1.0+r23-5ubuntu2).
fastboot is already the newest version (1:8.1.0+r23-5ubuntu2).
fastboot set to manually installed.
sunxi-tools is already the newest version (1.4.2+git20181114.6d598a-3).
curl is already the newest version (7.68.0-1ubuntu2.6).
git is already the newest version (1:2.25.1-1ubuntu3.1).
u-boot-tools is already the newest version (2021.01+dfsg-3ubuntu0~20.04.3).
0 upgraded, 0 newly installed, 0 to remove and 5 not upgraded.

Adding current user to dialout group

Adding current user to plugdev group

Adding udev rule for Allwinner device
SUBSYSTEM=="usb", ATTRS{idVendor}=="1f3a", ATTRS{idProduct}=="efe8",
GROUP="plugdev", MODE="0660" SYMLINK+="usb-chip"
SUBSYSTEM=="usb", ATTRS{idVendor}=="18d1", ATTRS{idProduct}=="1010",
GROUP="plugdev", MODE="0660" SYMLINK+="usb-chip-fastboot"
SUBSYSTEM=="usb", ATTRS{idVendor}=="1f3a", ATTRS{idProduct}=="1010",
GROUP="plugdev", MODE="0660" SYMLINK+="usb-chip-fastboot"
SUBSYSTEM=="usb", ATTRS{idVendor}=="067b", ATTRS{idProduct}=="2303",
GROUP="plugdev", MODE="0660" SYMLINK+="usb-serial-adapter"

Installing CHIP-tools
Cloning into 'CHIP-tools'...
remote: Enumerating objects: 554, done.
remote: Total 554 (delta 0), reused 0 (delta 0), pack-reused 554
Receiving objects: 100% (554/554), 129.52 KiB | 157.00 KiB/s, done.
Resolving deltas: 100% (324/324), done.
== Gui selected ==
== preparing images ==
== New image available ==
== Downloading.. ==
--2021-09-08 21:26:29--
http://chip.iffpossibilities.com/chip/images/stable/qui/149/spl-40000-1000-100.bin
Resolving chip.iffpossibilities.com (chip.iffpossibilities.com)...
23.239.1.46, 2600:3c01:f03c:91ff:fe08:29a3
Connecting to chip.iffpossibilities.com
(chip.iffpossibilities.com)23.239.1.46:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 278528 (272K) [application/octet-stream]
Saving to: 'spl-40000-1000-100.bin'

spl-40000-1000-100.bin
100%[=====>] 272.00K
246KB/s in 1.1s

2021-09-08 21:26:31 (246 KB/s) - 'spl-40000-1000-100.bin' saved [278528/278528]

--2021-09-08 21:26:31--
http://chip.iffpossibilities.com/chip/images/stable/qui/149/spl-400000-4000-500.bin
Resolving chip.iffpossibilities.com (chip.iffpossibilities.com)...
23.239.1.46, 2600:3c01:f03c:91ff:fe08:29a3
Connecting to chip.iffpossibilities.com
(chip.iffpossibilities.com)23.239.1.46:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 4521984 (4.3M) [application/octet-stream]
Saving to: 'spl-400000-4000-500.bin'

spl-400000-4000-500.bin
100%[=====>] 4.31M
1.55MB/s in 2.8s

2021-09-08 21:26:34 (1.55 MB/s) - 'spl-400000-4000-500.bin' saved
[4521984/4521984]

--2021-09-08 21:26:34--
http://chip.iffpossibilities.com/chip/images/stable/qui/149/spl-400000-4000-680.bin
Resolving chip.iffpossibilities.com (chip.iffpossibilities.com)...
23.239.1.46, 2600:3c01:f03c:91ff:fe08:29a3
Connecting to chip.iffpossibilities.com
(chip.iffpossibilities.com)23.239.1.46:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 4620288 (4.4M) [application/octet-stream]
Saving to: 'spl-400000-4000-680.bin'

spl-400000-4000-680.bin
100%[=====>] 4.41M
470KB/s in 15s

2021-09-08 21:26:50 (295 KB/s) - 'spl-400000-4000-680.bin' saved
[4620288/4620288]

--2021-09-08 21:26:50--
http://chip.iffpossibilities.com/chip/images/stable/qui/149/sunxi-spl.bin
Resolving chip.iffpossibilities.com (chip.iffpossibilities.com)...
23.239.1.46, 2600:3c01:f03c:91ff:fe08:29a3
```

```
Connecting to chip.ifoossibilities.com
(chip.ifoossibilities.com)[23.239.1.46]:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 16384 (16K) [application/octet-stream]
Saving to: 'sunxi-spl.bin'

sunxi-spl.bin
100%[=====>] 16.00K
57.0KB/s in 0.3s

2021-09-08 21:26:51 (57.0 KB/s) - 'sunxi-spl.bin' saved [16384/16384]

--2021-09-08 21:26:51--
http://chip.ifoossibilities.com/chip/images/stable/qui/149/u-boot-dtb.bin
Resolving chip.ifoossibilities.com (chip.ifoossibilities.com)...
23.239.1.46, 2600:3c01:f03c:91ff:fe08:29a3
Connecting to chip.ifoossibilities.com
(chip.ifoossibilities.com)[23.239.1.46]:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 625858 (611K) [application/octet-stream]
Saving to: 'u-boot-dtb.bin'

u-boot-dtb.bin
100%[=====>] 611.19K
432KB/s in 1.4s

2021-09-08 21:26:53 (432 KB/s) - 'u-boot-dtb.bin' saved [625858/625858]

--2021-09-08 21:26:53--
http://chip.ifoossibilities.com/chip/images/stable/qui/149/uboot-40000.bin
Resolving chip.ifoossibilities.com (chip.ifoossibilities.com)...
23.239.1.46, 2600:3c01:f03c:91ff:fe08:29a3
Connecting to chip.ifoossibilities.com
(chip.ifoossibilities.com)[23.239.1.46]:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 786432 (768K) [application/octet-stream]
Saving to: 'uboot-40000.bin'

uboot-40000.bin
100%[=====>] 768.00K
143KB/s in 5.4s

2021-09-08 21:26:59 (143 KB/s) - 'uboot-40000.bin' saved [786432/786432]

--2021-09-08 21:26:59--
http://chip.ifoossibilities.com/chip/images/stable/qui/149/uboot-400000.bin
Resolving chip.ifoossibilities.com (chip.ifoossibilities.com)...
23.239.1.46, 2600:3c01:f03c:91ff:fe08:29a3
Connecting to chip.ifoossibilities.com
(chip.ifoossibilities.com)[23.239.1.46]:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 4194304 (4.0M) [application/octet-stream]
Saving to: 'uboot-400000.bin'

uboot-400000.bin
100%[=====>] 4.00M
342KB/s in 11s

2021-09-08 21:27:11 (364 KB/s) - 'uboot-400000.bin' saved [4194304/4194304]

== Staging for NAND probe ==
Image Name: detect NAND
Created: Wed Sep 8 21:27:11 2021
Image Type: ARM Linux Script (uncompressed)
Data Size: 97 Bytes = 0.09 KiB = 0.00 MiB
Load Address: 00000000
Entry Point: 00000000
Contents:
  Image 0: 89 Bytes = 0.09 KiB = 0.00 MiB
waiting for fel...OK
waiting for fel....OK
NAND detected:
nand_erasize=400000
nand_oobsize=680
nand_writesize=4000
== Downloading new UBI, this will be cached for future flashes. ==
--2021-09-08 21:27:28--
http://chip.ifoossibilities.com/chip/images/stable/qui/149/chip-400000-4000-680.ubi.sparse
Resolving chip.ifoossibilities.com (chip.ifoossibilities.com)...
23.239.1.46, 2600:3c01:f03c:91ff:fe08:29a3
Connecting to chip.ifoossibilities.com
(chip.ifoossibilities.com)[23.239.1.46]:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 687865896 (656M)
Saving to: 'chip-400000-4000-680.ubi.sparse'

chip-400000-4000-680.ubi.spa
100%[=====>] 656.00M
462KB/s in 33m 43s

2021-09-08 22:01:12 (332 KB/s) - 'chip-400000-4000-680.ubi.sparse'
saved [687865896/687865896]

Image Name: flash gui
Created: Wed Sep 8 22:01:12 2021
Image Type: ARM Linux Script (uncompressed)
Data Size: 1784 Bytes = 1.74 KiB = 0.00 MiB
Load Address: 00000000
Entry Point: 00000000
Contents:
  Image 0: 1776 Bytes = 1.73 KiB = 0.00 MiB
waiting for fel...[sudo] password for systemwork:
OK
waiting for fastboot.....OK
target reported max download size of 33554432 bytes
sending sparse 'UBI' 1/24 (28672 KB)...
OKAY [ 2.013s]
writing 'UBI' 1/24...
OKAY [ 2.101s]
sending sparse 'UBI' 2/24 (28672 KB)...
```

OKAY [2.015s]
writing 'UBI' 2/24...
OKAY [5.571s]
sending sparse 'UBI' 3/24 (28672 KB)...
OKAY [2.005s]
writing 'UBI' 3/24...
OKAY [12.535s]
sending sparse 'UBI' 4/24 (28672 KB)...
OKAY [1.996s]
writing 'UBI' 4/24...
OKAY [12.535s]
sending sparse 'UBI' 5/24 (28672 KB)...
OKAY [1.953s]
writing 'UBI' 5/24...
OKAY [12.525s]
sending sparse 'UBI' 6/24 (28672 KB)...
OKAY [2.001s]
writing 'UBI' 6/24...
OKAY [12.537s]
sending sparse 'UBI' 7/24 (28672 KB)...
OKAY [1.997s]
writing 'UBI' 7/24...
OKAY [12.527s]
sending sparse 'UBI' 8/24 (28672 KB)...
OKAY [1.951s]
writing 'UBI' 8/24...
OKAY [12.539s]
sending sparse 'UBI' 9/24 (28672 KB)...
OKAY [1.992s]
writing 'UBI' 9/24...
OKAY [12.532s]
sending sparse 'UBI' 10/24 (28672 KB)...
OKAY [1.970s]
writing 'UBI' 10/24...
OKAY [12.525s]
sending sparse 'UBI' 11/24 (28672 KB)...
OKAY [1.997s]
writing 'UBI' 11/24...
OKAY [12.536s]
sending sparse 'UBI' 12/24 (28672 KB)...
OKAY [2.018s]
writing 'UBI' 12/24...
OKAY [12.537s]
sending sparse 'UBI' 13/24 (28672 KB)...
OKAY [2.012s]
writing 'UBI' 13/24...
OKAY [12.535s]
sending sparse 'UBI' 14/24 (28672 KB)...
OKAY [1.977s]
writing 'UBI' 14/24...
OKAY [12.531s]
sending sparse 'UBI' 15/24 (28672 KB)...
OKAY [1.973s]
writing 'UBI' 15/24...
OKAY [12.528s]
sending sparse 'UBI' 16/24 (28672 KB)...
OKAY [1.989s]
writing 'UBI' 16/24...
OKAY [12.527s]
sending sparse 'UBI' 17/24 (28672 KB)...
OKAY [2.008s]
writing 'UBI' 17/24...
OKAY [12.528s]
sending sparse 'UBI' 18/24 (28672 KB)...
OKAY [1.974s]
writing 'UBI' 18/24...
OKAY [12.525s]
sending sparse 'UBI' 19/24 (28672 KB)...
OKAY [2.013s]
writing 'UBI' 19/24...
OKAY [12.530s]
sending sparse 'UBI' 20/24 (28672 KB)...
OKAY [1.987s]
writing 'UBI' 20/24...
OKAY [12.532s]
sending sparse 'UBI' 21/24 (28672 KB)...
OKAY [1.974s]
writing 'UBI' 21/24...
OKAY [12.523s]
sending sparse 'UBI' 22/24 (28672 KB)...
OKAY [1.998s]
writing 'UBI' 22/24...
OKAY [12.532s]
sending sparse 'UBI' 23/24 (28672 KB)...
OKAY [2.002s]
writing 'UBI' 23/24...
OKAY [9.725s]
sending sparse 'UBI' 24/24 (12288 KB)...
OKAY [0.854s]
writing 'UBI' 24/24...
OKAY [2.809s]
finished. total time: 317.499s
resuming boot...
OKAY [0.000s]
finished. total time: 0.000s

FLASH VERIFICATION COMPLETE.

```
# # #  
#####  
###  ###  
# {#} #  
### %#####  
# #  
###  ###  
#####  
# # #
```

CHIP is ready to roll!

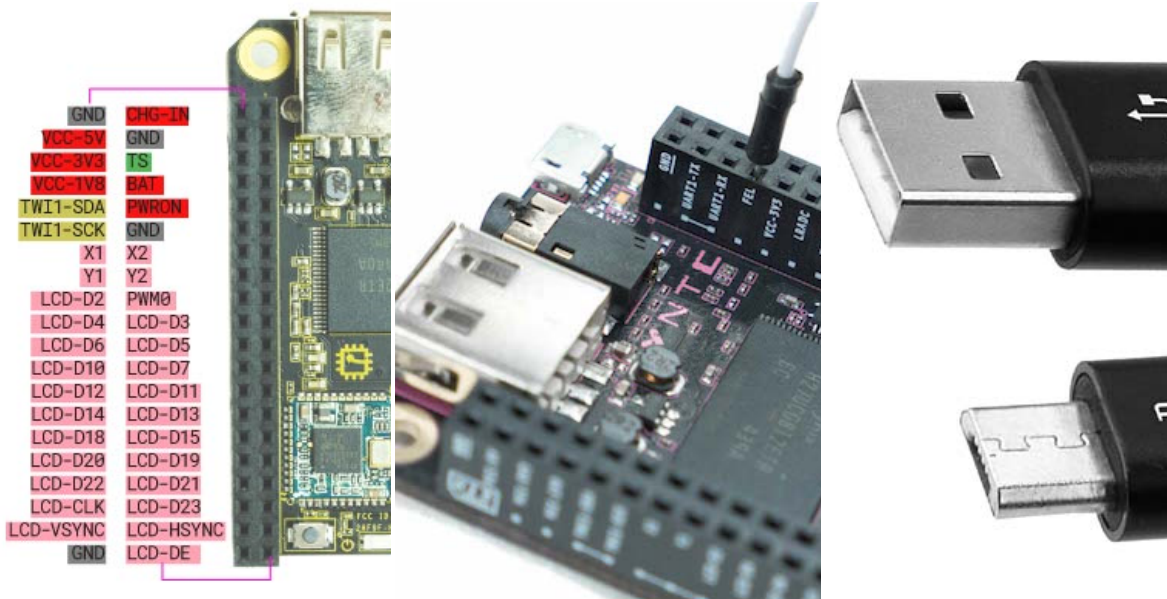
Now after installing several things still faced problem then suddenly I got a blog post.

<https://githubmemory.com/repo/Thore-Krug/Flash-CHIP/issues> Which helps me to short out problem.

Steps for Flashing the chip (Reinstall/unbrick/factory reset) on OS Ubuntu 20.04.3 LTS (Focal Fossa)

FEL mode

Here is a photo (which may be clearer than the animation in the web flasher) which shows where to place your jumper wire or paper clip:



You have to connect FEL to GND through jumper before plugged with computer with cable.

```
-----
sudo apt update && sudo apt upgrade
sudo apt install -y build-essential git make libusb-1.0-0-dev pkg-config android-tools-fastboot
cd ~/Downloads
git clone --branch v1.4.1 https://github.com/linux-sunxi/sunxi-tools.git
cd ~/Downloads/sunxi-tools
make
sudo make install
sudo make install-misc
cd ~/Downloads
git clone https://github.com/Thore-Krug/Flash-CHIP
cd ~/Downloads/Flash-CHIP
sudo chmod +x Flash.sh
./Flash.sh
-----
```

And it works.

Now question is others complains about these steps as after following above steps they are unable to Flashing the chip (Reinstall/unbrick/factory reset) on OS Ubuntu 20.04.3 LTS (Focal Fossa).

So I documented those steps I followed before applying above steps.

```
systemwork@ansuman-SYSTEMWORK:~$ lsusb
Bus 002 Device 002: ID 8087:8000 Intel Corp.
Bus 002 Device 001: ID 1d6b:0002 Linux Foundation 2.0 root hub
Bus 001 Device 002: ID 8087:8008 Intel Corp.
Bus 001 Device 001: ID 1d6b:0002 Linux Foundation 2.0 root hub
Bus 004 Device 001: ID 1d6b:0003 Linux Foundation 3.0 root hub
Bus 003 Device 004: ID 046d:c077 Logitech, Inc. M105 Optical Mouse
Bus 003 Device 009: ID 0461:4d6a Primax Electronics, Ltd
Bus 003 Device 007: ID 0a5c:4503 Broadcom Corp. Mouse (Boot Interface Subclass)
Bus 003 Device 005: ID 0a5c:4502 Broadcom Corp. Keyboard (Boot Interface Subclass)
Bus 003 Device 003: ID 0a5c:4500 Broadcom Corp. BCM2046B1 USB 2.0 Hub (part of BCM2046 Bluetooth)
Bus 003 Device 011: ID 1f3a:efe8 Onda (unverified) V972 tablet in flashing mode
Bus 003 Device 002: ID 046d:c31d Logitech, Inc. Media Keyboard K200
Bus 003 Device 008: ID 0bc2:2322 Seagate RSS LLC SRD0NF1 Expansion Portable (STEA)
Bus 003 Device 006: ID 2001:3319 D-Link Corp. Wireless N Nano USB Adapter
Bus 003 Device 001: ID 1d6b:0002 Linux Foundation 2.0 root hub
```

**It shows that CHIP is detected by computer. Each time I unplug and re-plug Bus003 remain same but Device11 become Device12 and so on.

Next command

```
systemwork@ansuman-SYSTEMWORK:~$ sudo apt-get update
```

Get:1 <http://in.archive.ubuntu.com/ubuntu focal InRelease> [265 kB]
Get:2 <http://in.archive.ubuntu.com/ubuntu focal-updates InRelease> [114 kB]
Get:3 <http://in.archive.ubuntu.com/ubuntu focal-backports InRelease> [101 kB]
Get:4 <http://in.archive.ubuntu.com/ubuntu focal/main amd64 Packages> [970 kB]
Get:5 <http://security.ubuntu.com/ubuntu focal-security InRelease> [114 kB]
Get:6 <http://in.archive.ubuntu.com/ubuntu focal/main i386 Packages> [718 kB]
Get:7 <http://in.archive.ubuntu.com/ubuntu focal/main Translation-en> [506 kB]
Get:8 <http://in.archive.ubuntu.com/ubuntu focal/main amd64 DEP-11 Metadata> [494 kB]
Get:9 <http://in.archive.ubuntu.com/ubuntu focal/main DEP-11 48x48 Icons> [98.4 kB]
Get:10 <http://in.archive.ubuntu.com/ubuntu focal/main DEP-11 64x64 Icons> [163 kB]
Get:11 <http://in.archive.ubuntu.com/ubuntu focal/main DEP-11 64x64@2 Icons> [15.8 kB]
Get:12 <http://in.archive.ubuntu.com/ubuntu focal/main amd64 c-n-f Metadata> [29.5 kB]
Get:13 <http://in.archive.ubuntu.com/ubuntu focal/restricted i386 Packages> [8,112 B]
Get:14 <http://in.archive.ubuntu.com/ubuntu focal/restricted amd64 Packages> [22.0 kB]
Get:15 <http://in.archive.ubuntu.com/ubuntu focal/restricted Translation-en> [6,212 B]
Get:16 <http://in.archive.ubuntu.com/ubuntu focal/restricted amd64 c-n-f Metadata> [392 B]
Get:17 <http://in.archive.ubuntu.com/ubuntu focal/universe amd64 Packages> [8,628 kB]
Get:18 <http://in.archive.ubuntu.com/ubuntu focal/universe i386 Packages> [4,642 kB]
Get:19 <http://security.ubuntu.com/ubuntu focal-security/main i386 Packages> [280 kB]
Get:20 <http://in.archive.ubuntu.com/ubuntu focal/universe Translation-en> [5,124 kB]
Get:21 <http://in.archive.ubuntu.com/ubuntu focal/universe amd64 DEP-11 Metadata> [3,603 kB]
Get:22 <http://in.archive.ubuntu.com/ubuntu focal/universe DEP-11 48x48 Icons> [3,016 kB]
Get:23 <http://in.archive.ubuntu.com/ubuntu focal/universe DEP-11 64x64 Icons> [7,794 kB]
Get:24 <http://security.ubuntu.com/ubuntu focal-security/main amd64 Packages> [860 kB]
Get:25 <http://in.archive.ubuntu.com/ubuntu focal/universe DEP-11 64x64@2 Icons> [44.3 kB]
Get:26 <http://in.archive.ubuntu.com/ubuntu focal/universe amd64 c-n-f Metadata> [265 kB]
Get:27 <http://in.archive.ubuntu.com/ubuntu focal/multiverse i386 Packages> [74.7 kB]
Get:28 <http://in.archive.ubuntu.com/ubuntu focal/multiverse amd64 Packages> [144 kB]
Get:29 <http://in.archive.ubuntu.com/ubuntu focal/multiverse Translation-en> [104 kB]
Get:30 <http://in.archive.ubuntu.com/ubuntu focal/multiverse amd64 DEP-11 Metadata> [48.4 kB]
Get:31 <http://in.archive.ubuntu.com/ubuntu focal/multiverse DEP-11 48x48 Icons> [23.1 kB]
Get:32 <http://in.archive.ubuntu.com/ubuntu focal/multiverse DEP-11 64x64 Icons> [192 kB]
Get:33 <http://in.archive.ubuntu.com/ubuntu focal/multiverse DEP-11 64x64@2 Icons> [214 B]
Get:34 <http://in.archive.ubuntu.com/ubuntu focal/multiverse amd64 c-n-f Metadata> [9,136 B]
Get:35 <http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 Packages> [1,204 kB]
Get:36 <http://in.archive.ubuntu.com/ubuntu focal-updates/main i386 Packages> [531 kB]
Get:37 <http://in.archive.ubuntu.com/ubuntu focal-updates/main Translation-en> [257 kB]
Get:38 <http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 DEP-11 Metadata> [283 kB]
Get:39 <http://in.archive.ubuntu.com/ubuntu focal-updates/main DEP-11 48x48 Icons> [60.5 kB]
Get:40 <http://in.archive.ubuntu.com/ubuntu focal-updates/main DEP-11 64x64 Icons> [95.0 kB]
Get:41 <http://in.archive.ubuntu.com/ubuntu focal-updates/main DEP-11 64x64@2 Icons> [29 B]
Get:42 <http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 c-n-f Metadata> [14.1 kB]
Get:43 <http://in.archive.ubuntu.com/ubuntu focal-updates/restricted amd64 Packages> [442 kB]
Get:44 <http://in.archive.ubuntu.com/ubuntu focal-updates/restricted i386 Packages> [19.3 kB]
Get:45 <http://in.archive.ubuntu.com/ubuntu focal-updates/restricted Translation-en> [63.3 kB]
Get:46 <http://in.archive.ubuntu.com/ubuntu focal-updates/restricted amd64 c-n-f Metadata> [500 B]
Get:47 <http://in.archive.ubuntu.com/ubuntu focal-updates/universe amd64 Packages> [854 kB]
Get:48 <http://in.archive.ubuntu.com/ubuntu focal-updates/universe i386 Packages> [631 kB]
Get:49 <http://in.archive.ubuntu.com/ubuntu focal-updates/universe Translation-en> [181 kB]
Get:50 <http://in.archive.ubuntu.com/ubuntu focal-updates/universe amd64 DEP-11 Metadata> [351 kB]
Get:51 <http://in.archive.ubuntu.com/ubuntu focal-updates/universe DEP-11 48x48 Icons> [214 kB]
Get:52 <http://in.archive.ubuntu.com/ubuntu focal-updates/universe DEP-11 64x64 Icons> [375 kB]
Get:53 <http://in.archive.ubuntu.com/ubuntu focal-updates/universe DEP-11 64x64@2 Icons> [29 B]
Get:54 <http://in.archive.ubuntu.com/ubuntu focal-updates/universe amd64 c-n-f Metadata> [18.8 kB]
Get:55 <http://in.archive.ubuntu.com/ubuntu focal-updates/multiverse amd64 Packages> [24.6 kB]
Get:56 <http://in.archive.ubuntu.com/ubuntu focal-updates/multiverse i386 Packages> [8,232 B]
Get:57 <http://in.archive.ubuntu.com/ubuntu focal-updates/multiverse Translation-en> [6,776 B]
Get:58 <http://in.archive.ubuntu.com/ubuntu focal-updates/multiverse amd64 DEP-11 Metadata> [940 B]
Get:59 <http://in.archive.ubuntu.com/ubuntu focal-updates/multiverse DEP-11 48x48 Icons> [1,865 B]
Get:60 <http://in.archive.ubuntu.com/ubuntu focal-updates/multiverse DEP-11 64x64 Icons> [2,498 B]
Get:61 <http://in.archive.ubuntu.com/ubuntu focal-updates/multiverse DEP-11 64x64@2 Icons> [29 B]
Get:62 <http://in.archive.ubuntu.com/ubuntu focal-updates/multiverse amd64 c-n-f Metadata> [620 B]
Get:63 <http://in.archive.ubuntu.com/ubuntu focal-backports/main i386 Packages> [2,568 B]
Get:64 <http://in.archive.ubuntu.com/ubuntu focal-backports/main amd64 Packages> [2,568 B]
Get:65 <http://in.archive.ubuntu.com/ubuntu focal-backports/main Translation-en> [1,120 B]
Get:66 <http://in.archive.ubuntu.com/ubuntu focal-backports/main amd64 c-n-f Metadata> [400 B]
Get:67 <http://in.archive.ubuntu.com/ubuntu focal-backports/restricted amd64 c-n-f Metadata> [116 B]
Get:68 <http://in.archive.ubuntu.com/ubuntu focal-backports/universe amd64 Packages> [5,812 B]
Get:69 <http://in.archive.ubuntu.com/ubuntu focal-backports/universe i386 Packages> [4,740 B]
Get:70 <http://in.archive.ubuntu.com/ubuntu focal-backports/universe Translation-en> [2,068 B]
Get:71 <http://in.archive.ubuntu.com/ubuntu focal-backports/universe amd64 DEP-11 Metadata> [10.3 kB]
Get:72 <http://in.archive.ubuntu.com/ubuntu focal-backports/universe DEP-11 48x48 Icons> [2,809 B]
Get:73 <http://in.archive.ubuntu.com/ubuntu focal-backports/universe DEP-11 64x64 Icons> [5,606 B]
Get:74 <http://in.archive.ubuntu.com/ubuntu focal-backports/universe DEP-11 64x64@2 Icons> [29 B]
Get:75 <http://in.archive.ubuntu.com/ubuntu focal-backports/universe amd64 c-n-f Metadata> [288 B]
Get:76 <http://in.archive.ubuntu.com/ubuntu focal-backports/multiverse amd64 c-n-f Metadata> [116 B]
Get:77 <http://security.ubuntu.com/ubuntu focal-security/main Translation-en> [166 kB]
Get:78 <http://security.ubuntu.com/ubuntu focal-security/main amd64 DEP-11 Metadata> [27.6 kB]
Get:79 <http://security.ubuntu.com/ubuntu focal-security/main DEP-11 48x48 Icons> [11.0 kB]
Get:80 <http://security.ubuntu.com/ubuntu focal-security/main DEP-11 64x64 Icons> [21.6 kB]
Get:81 <http://security.ubuntu.com/ubuntu focal-security/main amd64 c-n-f Metadata> [8,600 B]
Get:82 <http://security.ubuntu.com/ubuntu focal-security/restricted amd64 Packages> [406 kB]
Get:83 <http://security.ubuntu.com/ubuntu focal-security/restricted i386 Packages> [18.0 kB]
Get:84 <http://security.ubuntu.com/ubuntu focal-security/restricted Translation-en> [58.1 kB]
Get:85 <http://security.ubuntu.com/ubuntu focal-security/restricted amd64 c-n-f Metadata> [500 B]
Get:86 <http://security.ubuntu.com/ubuntu focal-security/universe amd64 Packages> [638 kB]
Get:87 <http://security.ubuntu.com/ubuntu focal-security/universe i386 Packages> [507 kB]
Get:88 <http://security.ubuntu.com/ubuntu focal-security/universe Translation-en> [101 kB]
Get:89 <http://security.ubuntu.com/ubuntu focal-security/universe amd64 DEP-11 Metadata> [61.0 kB]
Get:90 <http://security.ubuntu.com/ubuntu focal-security/universe DEP-11 48x48 Icons> [29.9 kB]
Get:91 <http://security.ubuntu.com/ubuntu focal-security/universe DEP-11 64x64 Icons> [57.8 kB]
Get:92 <http://security.ubuntu.com/ubuntu focal-security/universe DEP-11 64x64@2 Icons> [29 B]
Get:93 <http://security.ubuntu.com/ubuntu focal-security/universe amd64 c-n-f Metadata> [12.3 kB]
Get:94 <http://security.ubuntu.com/ubuntu focal-security/multiverse amd64 Packages> [21.9 kB]
Get:95 <http://security.ubuntu.com/ubuntu focal-security/multiverse i386 Packages> [7,224 B]
Get:96 <http://security.ubuntu.com/ubuntu focal-security/multiverse Translation-en> [4,948 B]
Get:97 <http://security.ubuntu.com/ubuntu focal-security/multiverse amd64 DEP-11 Metadata> [2,464 B]
Get:98 <http://security.ubuntu.com/ubuntu focal-security/multiverse DEP-11 48x48 Icons> [29 B]
Get:99 <http://security.ubuntu.com/ubuntu focal-security/multiverse DEP-11 64x64 Icons> [2,638 B]
Get:100 <http://security.ubuntu.com/ubuntu focal-security/multiverse DEP-11 64x64@2 Icons> [29 B]
Get:101 <http://security.ubuntu.com/ubuntu focal-security/multiverse amd64 c-n-f Metadata> [540 B] Fetched 46.3 MB in 14s (3,347 kB/s)
Reading package lists... Done

systemwork@ansuman-SYSTEMWORK:~\$ sudo apt-get install libncurses5-dev

libc6-i386 lib32stdc++6 lib32z1

Reading package lists... Done

Building dependency tree

Reading state information... Done

The following additional packages will be installed:

lib32gcc-s1 libc-dev-bin libc6-dev libcrypt-dev libncurses-dev

```
linux-libc-dev manpages-dev
Suggested packages:
  glibc-doc ncurses-doc
The following NEW packages will be installed:
  lib32gcc-s1 lib32stdc++6 lib32z1 libc-dev-bin libc6-dev libc6-i386
libcrypt-dev libncurses-dev libncurses5-dev
  linux-libc-dev manpages-dev
0 upgraded, 11 newly installed, 0 to remove and 30 not upgraded.
Need to get 9,771 kB of archives.
After this operation, 50.2 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64
libc6-i386 amd64 2.31-0ubuntu9.2 [2,723 kB]
Get:2 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64
lib32gcc-s1 amd64 10.3.0-1ubuntu1~20.04 [49.2 kB]
Get:3 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64
lib32z1 amd64 1:1.2.11.dfsg-2ubuntu1.2 [56.5 kB]
Get:4 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64
libc-dev-bin amd64 2.31-0ubuntu9.2 [71.8 kB]
Get:5 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64
linux-libc-dev amd64 5.4.0-84.94 [1,115 kB]
Get:6 http://in.archive.ubuntu.com/ubuntu focal/main amd64
libcrypt-dev amd64 1:4.4.10-10ubuntu4 [104 kB]
Get:7 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64
libc6-dev amd64 2.31-0ubuntu9.2 [2,520 kB]
Get:8 http://in.archive.ubuntu.com/ubuntu focal/main amd64
libncurses-dev amd64 6.2-0ubuntu2 [339 kB]
Get:9 http://in.archive.ubuntu.com/ubuntu focal/main amd64
libncurses5-dev amd64 6.2-0ubuntu2 [976 B]
Get:10 http://in.archive.ubuntu.com/ubuntu focal/main amd64
manpages-dev all 5.05-1 [2,266 kB]
Get:11 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64
lib32stdc++6 amd64 10.3.0-1ubuntu1~20.04 [525 kB]
Fetched 9,771 kB in 2s (6,406 kB/s)
Selecting previously unselected package libc6-i386.
(Reading database ... 145569 files and directories currently installed.)
Preparing to unpack .../00-libc6-i386_2.31-0ubuntu9.2_amd64.deb ...
Unpacking libc6-i386 (2.31-0ubuntu9.2) ...
Selecting previously unselected package lib32gcc-s1.
Preparing to unpack .../01-lib32gcc-s1_10.3.0-1ubuntu1~20.04_amd64.deb ...
Unpacking lib32gcc-s1 (10.3.0-1ubuntu1~20.04) ...
Selecting previously unselected package lib32z1.
Preparing to unpack .../02-lib32z1_1%3a1.2.11.dfsg-2ubuntu1.2_amd64.deb ...
Unpacking lib32z1 (1:1.2.11.dfsg-2ubuntu1.2) ...
Selecting previously unselected package libc-dev-bin.
Preparing to unpack .../03-libc-dev-bin_2.31-0ubuntu9.2_amd64.deb ...
Unpacking libc-dev-bin (2.31-0ubuntu9.2) ...
Selecting previously unselected package linux-libc-dev:amd64.
Preparing to unpack .../04-linux-libc-dev_5.4.0-84.94_amd64.deb ...
Unpacking linux-libc-dev:amd64 (5.4.0-84.94) ...
Selecting previously unselected package libcrypt-dev:amd64.
Preparing to unpack .../05-libcrypt-dev_1%3a4.4.10-10ubuntu4_amd64.deb ...
Unpacking libcrypt-dev:amd64 (1:4.4.10-10ubuntu4) ...
Selecting previously unselected package libc6-dev:amd64.
Preparing to unpack .../06-libc6-dev_2.31-0ubuntu9.2_amd64.deb ...
Unpacking libc6-dev:amd64 (2.31-0ubuntu9.2) ...
Selecting previously unselected package libncurses-dev:amd64.
Preparing to unpack .../07-libncurses-dev_6.2-0ubuntu2_amd64.deb ...
Unpacking libncurses-dev:amd64 (6.2-0ubuntu2) ...
Selecting previously unselected package libncurses5-dev:amd64.
Preparing to unpack .../08-libncurses5-dev_6.2-0ubuntu2_amd64.deb ...
Unpacking libncurses5-dev:amd64 (6.2-0ubuntu2) ...
Selecting previously unselected package manpages-dev.
Preparing to unpack .../09-manpages-dev_5.05-1_all.deb ...
Unpacking manpages-dev (5.05-1) ...
Selecting previously unselected package lib32stdc++6.
Preparing to unpack .../10-lib32stdc++6_10.3.0-1ubuntu1~20.04_amd64.deb ...
Unpacking lib32stdc++6 (10.3.0-1ubuntu1~20.04) ...
Setting up manpages-dev (5.05-1) ...
Setting up linux-libc-dev:amd64 (5.4.0-84.94) ...
Setting up libcrypt-dev:amd64 (1:4.4.10-10ubuntu4) ...
Setting up libc6-i386 (2.31-0ubuntu9.2) ...
Setting up libc-dev-bin (2.31-0ubuntu9.2) ...
Setting up lib32z1 (1:1.2.11.dfsg-2ubuntu1.2) ...
Setting up lib32gcc-s1 (10.3.0-1ubuntu1~20.04) ...
Setting up lib32stdc++6 (10.3.0-1ubuntu1~20.04) ...
Setting up libc6-dev:amd64 (2.31-0ubuntu9.2) ...
Setting up libncurses-dev:amd64 (6.2-0ubuntu2) ...
Setting up libncurses5-dev:amd64 (6.2-0ubuntu2) ...
Processing triggers for man-db (2.9.1-1) ...
Processing triggers for libc-bin (2.31-0ubuntu9.2) ...

systemwork@ansuman-SYSTEMWORK:~$ sudo apt install git
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  git-man liberror-perl
Suggested packages:
  git-daemon-run | git-daemon-sysvinit git-doc git-el git-email
  git-gui gitk gitweb git-cvs git-mediawiki git-svn
The following NEW packages will be installed:
  git git-man liberror-perl
0 upgraded, 3 newly installed, 0 to remove and 4 not upgraded.
Need to get 5,468 kB of archives.
After this operation, 38.4 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://in.archive.ubuntu.com/ubuntu focal/main amd64 liberror-perl all 0.17029-1 [26.5 kB]
Get:2 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 git-man all 1:2.25.1-1ubuntu3.1 [884 kB]
Get:3 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 git amd64 1:2.25.1-1ubuntu3.1 [4,557 kB]
Fetched 5,468 kB in 1s (4,014 kB/s)
Selecting previously unselected package liberror-perl.
(Reading database ... 187842 files and directories currently installed.)
Preparing to unpack .../liberror-perl_0.17029-1_all.deb ...
Unpacking liberror-perl (0.17029-1) ...
Selecting previously unselected package git-man.
Preparing to unpack .../git-man_1%3a2.25.1-1ubuntu3.1_all.deb ...
Unpacking git-man (1:2.25.1-1ubuntu3.1) ...
Selecting previously unselected package git.
Preparing to unpack .../git_1%3a2.25.1-1ubuntu3.1_amd64.deb ...
```

```
Unpacking git (1:2.25.1-1ubuntu3.1) ...
Setting up liberror-perl (0.17029-1) ...
Setting up git-man (1:2.25.1-1ubuntu3.1) ...
Setting up git (1:2.25.1-1ubuntu3.1) ...
Processing triggers for man-db (2.9.1-1) ...
```

```
systemwork@ansuman-SYSTEMWORK:~$ git clone https://github.com/linux-sunxi/sunxi-tools.git
fatal: destination path 'sunxi-tools' already exists and is not an empty directory.
systemwork@ansuman-SYSTEMWORK:~$ cd sunxi-tools
systemwork@ansuman-SYSTEMWORK:~/sunxi-tools$ make
```

Command 'make' not found, but can be installed with:

```
sudo apt install make # version 4.2.1-1.2, or
sudo apt install make-guile # version 4.2.1-1.2
```

```
systemwork@ansuman-SYSTEMWORK:~/sunxi-tools$ sudo apt install make #version 4.2.1-1.2
```

```
[sudo] password for systemwork:
Reading package lists... Done
Building dependency tree
Reading state information... Done
Suggested packages:
make-doc
The following NEW packages will be installed:
make
0 upgraded, 1 newly installed, 0 to remove and 4 not upgraded.
Need to get 162 kB of archives.
After this operation, 393 kB of additional disk space will be used.
Get:1 http://in.archive.ubuntu.com/ubuntu focal/main amd64 make amd64
4.2.1-1.2 [162 kB]
Fetched 162 kB in 0s (631 kB/s)
Selecting previously unselected package make.
(Reading database ... 188777 files and directories currently installed.)
Preparing to unpack .../make_4.2.1-1.2_amd64.deb ...
Unpacking make (4.2.1-1.2) ...
Setting up make (4.2.1-1.2) ...
Processing triggers for man-db (2.9.1-1) ...
```

```
systemwork@ansuman-SYSTEMWORK:~$ sudo apt install libusb-1.0-0-dev
```

```
libz-dev libbdt-dev
Reading package lists... Done
Building dependency tree
Reading state information... Done
Note, selecting 'zlib1g-dev' instead of 'libz-dev'
The following additional packages will be installed:
libbdt1 libusb-1.0-doc
The following NEW packages will be installed:
libbdt-dev libbdt1 libusb-1.0-0-dev libusb-1.0-doc zlib1g-dev
0 upgraded, 5 newly installed, 0 to remove and 4 not upgraded.
Need to get 441 kB of archives.
After this operation, 2,642 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://in.archive.ubuntu.com/ubuntu focal/main amd64 libusb-1.0-0-dev amd64 2:1.0.23-2build1 [64.4 kB]
Get:2 http://in.archive.ubuntu.com/ubuntu focal/main amd64 libusb-1.0-doc all 2:1.0.23-2build1 [172 kB]
Get:3 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 zlib1g-dev amd64 1:1.2.11.dfsg-2ubuntu1.2 [155 kB]
Get:4 http://in.archive.ubuntu.com/ubuntu focal/main amd64 libbdt1 amd64 1.5.1-1 [18.8 kB]
Get:5 http://in.archive.ubuntu.com/ubuntu focal/main amd64 libbdt-dev amd64 1.5.1-1 [30.3 kB]
Fetched 441 kB in 0s (956 kB/s)
Selecting previously unselected package libusb-1.0-0-dev:amd64.
(Reading database ... 188845 files and directories currently installed.)
Preparing to unpack .../libusb-1.0-0-dev_2%3a1.0.23-2build1_amd64.deb ...
Unpacking libusb-1.0-0-dev:amd64 (2:1.0.23-2build1) ...
Selecting previously unselected package libusb-1.0-doc.
Preparing to unpack .../libusb-1.0-doc_2%3a1.0.23-2build1_all.deb ...
Unpacking libusb-1.0-doc (2:1.0.23-2build1) ...
Selecting previously unselected package zlib1g-dev:amd64.
Preparing to unpack .../zlib1g-dev_1%3a1.2.11.dfsg-2ubuntu1.2_amd64.deb ...
Unpacking zlib1g-dev:amd64 (1:1.2.11.dfsg-2ubuntu1.2) ...
Selecting previously unselected package libbdt1:amd64.
Preparing to unpack .../libbdt1_1.5.1-1_amd64.deb ...
Unpacking libbdt1:amd64 (1.5.1-1) ...
Selecting previously unselected package libbdt-dev.
Preparing to unpack .../libbdt-dev_1.5.1-1_amd64.deb ...
Unpacking libbdt-dev (1.5.1-1) ...
Setting up libusb-1.0-doc (2:1.0.23-2build1) ...
Setting up libusb-1.0-0-dev:amd64 (2:1.0.23-2build1) ...
Setting up libbdt1:amd64 (1.5.1-1) ...
Setting up libbdt-dev (1.5.1-1) ...
Setting up zlib1g-dev:amd64 (1:1.2.11.dfsg-2ubuntu1.2) ...
Processing triggers for man-db (2.9.1-1) ...
Processing triggers for libc-bin (2.31-0ubuntu9.2) ...
```

```
systemwork@ansuman-SYSTEMWORK:~$ git clone https://github.com/linux-sunxi/sunxi-tools.git
```

```
Cloning into 'sunxi-tools'...
remote: Enumerating objects: 2092, done.
remote: Counting objects: 100% (51/51), done.
remote: Compressing objects: 100% (32/32), done.
remote: Total 2092 (delta 25), reused 34 (delta 19), pack-reused 2041
Receiving objects: 100% (2092/2092), 765.85 KiB | 64.00 KiB/s, done.
Resolving deltas: 100% (1275/1275), done.
systemwork@ansuman-SYSTEMWORK:~$ dir
Desktop Documents Downloads Music Pictures Public sunxi-tools
Templates Videos working-CHIP-tools
systemwork@ansuman-SYSTEMWORK:~$ cd sunxi-tools
systemwork@ansuman-SYSTEMWORK:~/sunxi-tools$ dir
adb-devprobe.sh fel-sdboot.lds Makefile script_bin.h
autoversion.sh fel-sdboot.S meminfo.c script.c
bin fel-splflash.c nand-common.h script_extractor.c
boot_head.lds fel-splflash.h nand-image-builder.c script_fex.c
boot_head.S fexc.c nand-part-a10.h script_fex.h
bootinfo.c fexc.h nand-part-a20.h script.h
common.h find-arm-gcc.sh nand-part.c script_uboot.c
fel.c fit_image.c nand-part-main.c script_uboot.h
fel-gpio_fit_image.h phoenix_info.c soc_info.c
fel_lib.c include pio.c soc_info.h
fel_lib.h jtag-loop.c progress.c tests
fel-remotefunc-compiler.rb jtag-loop.lds progress.h thanks
fel-remotefunc-spi-data-transfer.c jtag-loop.S README.md
uart0-helloworld-sdboot.c
fel-remotefunc-spi-data-transfer.h LICENSE.md script_bin.c
uart0-helloworld-sdboot.lds
```

```
systemwork@ansuman-SYSTEMWORK:~$ sudo apt-get update
```

```
Hit:1 http://in.archive.ubuntu.com/ubuntu focal InRelease
Hit:2 http://in.archive.ubuntu.com/ubuntu focal-updates InRelease
```

Hit:3 <http://in.archive.ubuntu.com/ubuntu focal-backports InRelease>
Get:4 <http://security.ubuntu.com/ubuntu focal-security InRelease> [114 kB]
Get:5 <http://security.ubuntu.com/ubuntu focal-security/main i386 Packages> [281 kB]
Get:6 <http://security.ubuntu.com/ubuntu focal-security/main amd64 Packages> [861 kB]
Get:7 <http://security.ubuntu.com/ubuntu focal-security/main Translation-en> [166 kB]
Get:8 <http://security.ubuntu.com/ubuntu focal-security/main amd64 c-n-f Metadata> [8,664 B]
Get:9 <http://security.ubuntu.com/ubuntu focal-security/universe amd64 Packages> [638 kB]
Get:10 <http://security.ubuntu.com/ubuntu focal-security/universe i386 Packages> [507 kB]
Get:11 <http://security.ubuntu.com/ubuntu focal-security/universe Translation-en> [101 kB]
Get:12 <http://security.ubuntu.com/ubuntu focal-security/universe amd64 c-n-f Metadata> [12.3 kB]
Fetched 2,689 kB in 4s (716 kB/s)
Reading package lists... Done

systemwork@ansuman-SYSTEMWORK:~\$ sudo apt-get install android-tools-fastboot

Reading package lists... Done

Building dependency tree

Reading state information... Done

The following additional packages will be installed:

adb android-libadb android-libbacktrace android-libboringssl
android-libcrypto-utils android-libc1
android-libf2fs-utils android-libunwind android-libutils
android-libziparchive android-sdk-platform-tools
android-sdk-platform-tools-common dmtracedump etc1tool f2fs-tools
fastboot graphviz hprof-conv libann0 libcdt5
libcgraph6 libf2fs-format4 libf2fs5 libgts-0.7-5 libgts-bin libgvc6
libgvpr2 liblab-gamut1 libpathplan4 p7zip
p7zip-full sqlite3

Suggested packages:

gsfonts graphviz-doc p7zip-rar sqlite3-doc

The following NEW packages will be installed:

adb android-libadb android-libbacktrace android-libboringssl
android-libcrypto-utils android-libc1
android-libf2fs-utils android-libunwind android-libutils
android-libziparchive android-sdk-platform-tools
android-sdk-platform-tools-common android-tools-fastboot dmtracedump
etc1tool f2fs-tools fastboot graphviz
hprof-conv libann0 libcdt5 libcgraph6 libf2fs-format4 libf2fs5
libgts-0.7-5 libgts-bin libgvc6 libgvpr2
liblab-gamut1 libpathplan4 p7zip p7zip-full sqlite3

0 upgraded, 33 newly installed, 0 to remove and 5 not upgraded.

Need to get 5,554 kB of archives.

After this operation, 21.9 MB of additional disk space will be used.

Do you want to continue? [Y/n] y

Get:1 <http://in.archive.ubuntu.com/ubuntu focal/universe amd64 android-libboringssl amd64 8.1.0+r23-2build1> [538 kB]
Get:2 <http://in.archive.ubuntu.com/ubuntu focal/universe amd64 android-libcrypto-utils amd64 1:8.1.0+r23-5ubuntu2> [8,324 B]
Get:3 <http://in.archive.ubuntu.com/ubuntu focal/universe amd64 android-libadb amd64 1:8.1.0+r23-5ubuntu2> [123 kB]
Get:4 <http://in.archive.ubuntu.com/ubuntu focal/universe amd64 adb amd64 1:8.1.0+r23-5ubuntu2> [87.6 kB]
Get:5 <http://in.archive.ubuntu.com/ubuntu focal/universe amd64 p7zip amd64 16.02+dfsg-7build1> [358 kB]
Get:6 <http://in.archive.ubuntu.com/ubuntu focal/universe amd64 p7zip-full amd64 16.02+dfsg-7build1> [1,187 kB]
Get:7 <http://in.archive.ubuntu.com/ubuntu focal/universe amd64 android-libunwind amd64 8.1.0+r23-2> [50.7 kB]
Get:8 <http://in.archive.ubuntu.com/ubuntu focal/universe amd64 android-libbacktrace amd64 1:8.1.0+r23-5ubuntu2> [45.2 kB]
Get:9 <http://in.archive.ubuntu.com/ubuntu focal/universe amd64 android-libc1 amd64 1:8.1.0+r23-2build1> [17.7 kB]
Get:10 <http://in.archive.ubuntu.com/ubuntu focal/universe amd64 libf2fs5 amd64 1.11.0-1.1ubuntu1> [14.1 kB]
Get:11 <http://in.archive.ubuntu.com/ubuntu focal/universe amd64 libf2fs-format4 amd64 1.11.0-1.1ubuntu1> [16.6 kB]
Get:12 <http://in.archive.ubuntu.com/ubuntu focal/universe amd64 android-libf2fs-utils amd64 8.1.0+r23-2> [11.0 kB]
Get:13 <http://in.archive.ubuntu.com/ubuntu focal/universe amd64 android-libutils amd64 1:8.1.0+r23-5ubuntu2> [48.1 kB]
Get:14 <http://in.archive.ubuntu.com/ubuntu focal/universe amd64 android-libziparchive amd64 1:8.1.0+r23-5ubuntu2> [23.5 kB]
Get:15 <http://in.archive.ubuntu.com/ubuntu focal/universe amd64 android-sdk-platform-tools-common all 27.0.0+12> [6,648 B]
Get:16 <http://in.archive.ubuntu.com/ubuntu focal/universe amd64 f2fs-tools amd64 1.11.0-1.1ubuntu1> [154 kB]
Get:17 <http://in.archive.ubuntu.com/ubuntu focal/universe amd64 libann0 amd64 1.1.2+doc-7build1> [26.0 kB]
Get:18 <http://in.archive.ubuntu.com/ubuntu focal/universe amd64 libcdt5 amd64 2.42.2-3build2> [18.7 kB]
Get:19 <http://in.archive.ubuntu.com/ubuntu focal/universe amd64 libcgraph6 amd64 2.42.2-3build2> [41.3 kB]
Get:20 <http://in.archive.ubuntu.com/ubuntu focal/universe amd64 libgts-0.7-5 amd64 0.7.6+darcs121130-4> [150 kB]
Get:21 <http://in.archive.ubuntu.com/ubuntu focal/universe amd64 libpathplan4 amd64 2.42.2-3build2> [21.9 kB]
Get:22 <http://in.archive.ubuntu.com/ubuntu focal/universe amd64 libgvc6 amd64 2.42.2-3build2> [647 kB]
Get:23 <http://in.archive.ubuntu.com/ubuntu focal/universe amd64 libgvpr2 amd64 2.42.2-3build2> [167 kB]
Get:24 <http://in.archive.ubuntu.com/ubuntu focal/universe amd64 liblab-gamut1 amd64 2.42.2-3build2> [177 kB]
Get:25 <http://in.archive.ubuntu.com/ubuntu focal/universe amd64 graphviz amd64 2.42.2-3build2> [590 kB]
Get:26 <http://in.archive.ubuntu.com/ubuntu focal/universe amd64 dmtracedump amd64 8.1.0+r23-3> [26.3 kB]
Get:27 <http://in.archive.ubuntu.com/ubuntu focal/universe amd64 etc1tool amd64 8.1.0+r23-1build1> [18.5 kB]
Get:28 <http://in.archive.ubuntu.com/ubuntu focal/universe amd64 fastboot amd64 1:8.1.0+r23-5ubuntu2> [58.5 kB]
Get:29 <http://in.archive.ubuntu.com/ubuntu focal/universe amd64 hprof-conv amd64 8.1.0+r23-2> [13.2 kB]
Get:30 <http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 sqlite3 amd64 3.31.1-4ubuntu0.2> [860 kB]
Get:31 <http://in.archive.ubuntu.com/ubuntu focal/universe amd64 android-sdk-platform-tools amd64 27.0.0+12> [3,564 B]
Get:32 <http://in.archive.ubuntu.com/ubuntu focal/universe amd64 libgts-bin amd64 0.7.6+darcs121130-4> [41.3 kB]
Get:33 <http://in.archive.ubuntu.com/ubuntu focal/universe amd64 android-tools-fastboot all 1:8.1.0+r23-5ubuntu2> [4,060 B]
Fetched 5,554 kB in 1s (4,804 kB/s)

Extracting templates from packages: 100%
Selecting previously unselected package android-libboringssl.
(Reading database ... 188970 files and directories currently installed.)
Preparing to unpack .../00-android-libboringssl_8.1.0+r23-2build1_amd64.deb ...
Unpacking android-libboringssl (8.1.0+r23-2build1) ...
Selecting previously unselected package android-libcrypto-utils.
Preparing to unpack
.../01-android-libcrypto-utils_1%3a8.1.0+r23-5ubuntu2_amd64.deb ...
Unpacking android-libcrypto-utils (1:8.1.0+r23-5ubuntu2) ...
Selecting previously unselected package android-libadb.
Preparing to unpack .../02-android-libadb_1%3a8.1.0+r23-5ubuntu2_amd64.deb ...
Unpacking android-libadb (1:8.1.0+r23-5ubuntu2) ...
Selecting previously unselected package adb.
Preparing to unpack .../03-adb_1%3a8.1.0+r23-5ubuntu2_amd64.deb ...
Unpacking adb (1:8.1.0+r23-5ubuntu2) ...
Selecting previously unselected package p7zip.
Preparing to unpack .../04-p7zip_16.02+dfsg-7build1_amd64.deb ...
Unpacking p7zip (16.02+dfsg-7build1) ...
Selecting previously unselected package p7zip-full.
Preparing to unpack .../05-p7zip-full_16.02+dfsg-7build1_amd64.deb ...
Unpacking p7zip-full (16.02+dfsg-7build1) ...
Selecting previously unselected package android-libunwind.
Preparing to unpack .../06-android-libunwind_8.1.0+r23-2_amd64.deb ...
Unpacking android-libunwind (8.1.0+r23-2) ...
Selecting previously unselected package android-libbacktrace.
Preparing to unpack
.../07-android-libbacktrace_1%3a8.1.0+r23-5ubuntu2_amd64.deb ...
Unpacking android-libbacktrace (1:8.1.0+r23-5ubuntu2) ...
Selecting previously unselected package android-libetl.
Preparing to unpack .../08-android-libetl_1%3a8.1.0+r23-2build1_amd64.deb ...
Unpacking android-libetl (1:8.1.0+r23-2build1) ...
Selecting previously unselected package libf2fs5:amd64.
Preparing to unpack .../09-libf2fs5_1.11.0-1.1ubuntu1_amd64.deb ...
Unpacking libf2fs5:amd64 (1.11.0-1.1ubuntu1) ...
Selecting previously unselected package libf2fs-format4:amd64.
Preparing to unpack .../10-libf2fs-format4_1.11.0-1.1ubuntu1_amd64.deb ...
Unpacking libf2fs-format4:amd64 (1.11.0-1.1ubuntu1) ...
Selecting previously unselected package android-libf2fs-utils.
Preparing to unpack .../11-android-libf2fs-utils_8.1.0+r23-2_amd64.deb ...
Unpacking android-libf2fs-utils (8.1.0+r23-2) ...
Selecting previously unselected package android-libutils.
Preparing to unpack .../12-android-libutils_1%3a8.1.0+r23-5ubuntu2_amd64.deb ...
Unpacking android-libutils (1:8.1.0+r23-5ubuntu2) ...
Selecting previously unselected package android-libziparchive.
Preparing to unpack
.../13-android-libziparchive_1%3a8.1.0+r23-5ubuntu2_amd64.deb ...
Unpacking android-libziparchive (1:8.1.0+r23-5ubuntu2) ...
Selecting previously unselected package android-sdk-platform-tools-common.
Preparing to unpack
.../14-android-sdk-platform-tools-common_27.0.0+12_all.deb ...
Unpacking android-sdk-platform-tools-common (27.0.0+12) ...
Selecting previously unselected package f2fs-tools.
Preparing to unpack .../15-f2fs-tools_1.11.0-1.1ubuntu1_amd64.deb ...
Unpacking f2fs-tools (1.11.0-1.1ubuntu1) ...
Selecting previously unselected package libann0.
Preparing to unpack .../16-libann0_1.1.2+doc-7build1_amd64.deb ...
Unpacking libann0 (1.1.2+doc-7build1) ...
Selecting previously unselected package libcdt5:amd64.
Preparing to unpack .../17-libcdt5_2.42.2-3build2_amd64.deb ...
Unpacking libcdt5:amd64 (2.42.2-3build2) ...
Selecting previously unselected package libcgraph6:amd64.
Preparing to unpack .../18-libcgraph6_2.42.2-3build2_amd64.deb ...
Unpacking libcgraph6:amd64 (2.42.2-3build2) ...
Selecting previously unselected package libgts-0.7-5:amd64.
Preparing to unpack .../19-libgts-0.7-5_0.7.6+darcs121130-4_amd64.deb ...
Unpacking libgts-0.7-5:amd64 (0.7.6+darcs121130-4) ...
Selecting previously unselected package libpathplan4:amd64.
Preparing to unpack .../20-libpathplan4_2.42.2-3build2_amd64.deb ...
Unpacking libpathplan4:amd64 (2.42.2-3build2) ...
Selecting previously unselected package libgvc6.
Preparing to unpack .../21-libgvc6_2.42.2-3build2_amd64.deb ...
Unpacking libgvc6 (2.42.2-3build2) ...
Selecting previously unselected package libgvpr2:amd64.
Preparing to unpack .../22-libgvpr2_2.42.2-3build2_amd64.deb ...
Unpacking libgvpr2:amd64 (2.42.2-3build2) ...
Selecting previously unselected package liblab-gamut1:amd64.
Preparing to unpack .../23-liblab-gamut1_2.42.2-3build2_amd64.deb ...
Unpacking liblab-gamut1:amd64 (2.42.2-3build2) ...
Selecting previously unselected package graphviz.
Preparing to unpack .../24-graphviz_2.42.2-3build2_amd64.deb ...
Unpacking graphviz (2.42.2-3build2) ...
Selecting previously unselected package dmtracedump.
Preparing to unpack .../25-dmtracedump_8.1.0+r23-3_amd64.deb ...
Unpacking dmtracedump (8.1.0+r23-3) ...
Selecting previously unselected package etc1tool.
Preparing to unpack .../26-etc1tool_8.1.0+r23-1build1_amd64.deb ...
Unpacking etc1tool (8.1.0+r23-1build1) ...
Selecting previously unselected package fastboot.
Preparing to unpack .../27-fastboot_1%3a8.1.0+r23-5ubuntu2_amd64.deb ...
Unpacking fastboot (1:8.1.0+r23-5ubuntu2) ...
Selecting previously unselected package hprof-conv.
Preparing to unpack .../28-hprof-conv_8.1.0+r23-2_amd64.deb ...
Unpacking hprof-conv (8.1.0+r23-2) ...
Selecting previously unselected package sqlite3.
Preparing to unpack .../29-sqlite3_3.31.1-4ubuntu0.2_amd64.deb ...
Unpacking sqlite3 (3.31.1-4ubuntu0.2) ...
Selecting previously unselected package android-sdk-platform-tools.
Preparing to unpack .../30-android-sdk-platform-tools_27.0.0+12_amd64.deb ...
Unpacking android-sdk-platform-tools (27.0.0+12) ...
Selecting previously unselected package libgts-bin.
Preparing to unpack .../31-libgts-bin_0.7.6+darcs121130-4_amd64.deb ...
Unpacking libgts-bin (0.7.6+darcs121130-4) ...
Selecting previously unselected package android-tools-fastboot.
Preparing to unpack
.../32-android-tools-fastboot_1%3a8.1.0+r23-5ubuntu2_all.deb ...
Unpacking android-tools-fastboot (1:8.1.0+r23-5ubuntu2) ...
Setting up android-sdk-platform-tools-common (27.0.0+12) ...
Setting up android-libetl (1:8.1.0+r23-2build1) ...
Setting up liblab-gamut1:amd64 (2.42.2-3build2) ...
Setting up libf2fs5:amd64 (1.11.0-1.1ubuntu1) ...

```
Setting up libgts-0.7-5:amd64 (0.7.6+darcs121130-4) ...
Setting up libpathplan4:amd64 (2.42.2-3build2) ...
Setting up libann0 (1.1.2+doc-7build1) ...
Setting up android-libboringssl (8.1.0+r23-2build1) ...
Setting up android-libcrypto-utils (1:8.1.0+r23-5ubuntu2) ...
Setting up libcdt5:amd64 (2.42.2-3build2) ...
Setting up libcgraph6:amd64 (2.42.2-3build2) ...
Setting up etc1tool (8.1.0+r23-1build1) ...
Setting up hprof-conv (8.1.0+r23-2) ...
Setting up libf2fs-format4:amd64 (1.11.0-1.1ubuntu1) ...
Setting up sqlite3 (3.31.1-4ubuntu0.2) ...
Setting up p7zip (16.02+dfsg-7build1) ...
Setting up libgts-bin (0.7.6+darcs121130-4) ...
Setting up f2fs-tools (1.11.0-1.1ubuntu1) ...
Setting up android-libf2fs-utils (8.1.0+r23-2) ...
Setting up android-libadb (1:8.1.0+r23-5ubuntu2) ...
Setting up p7zip-full (16.02+dfsg-7build1) ...
Setting up adb (1:8.1.0+r23-5ubuntu2) ...
Setting up android-libunwind (8.1.0+r23-2) ...
Setting up libgvc6 (2.42.2-3build2) ...
Setting up android-libbacktrace (1:8.1.0+r23-5ubuntu2) ...
Setting up libgvpr2:amd64 (2.42.2-3build2) ...
Setting up graphviz (2.42.2-3build2) ...
Setting up android-libutills (1:8.1.0+r23-5ubuntu2) ...
Setting up dmtracedump (8.1.0+r23-3) ...
Setting up android-libziparchive (1:8.1.0+r23-5ubuntu2) ...
Setting up fastboot (1:8.1.0+r23-5ubuntu2) ...
Setting up android-sdk-platform-tools (27.0.0+12) ...
Setting up android-tools-fastboot (1:8.1.0+r23-5ubuntu2) ...
Processing triggers for libc-bin (2.31-0ubuntu9.2) ...
Processing triggers for man-db (2.9.1-1) ...
Processing triggers for initramfs-tools (0.136ubuntu6.6) ...
update-initramfs: Generating /boot/initrd.img-5.11.0-34-generic
```

systemwork@ansuman-SYSTEMWORK:~\$ sudo apt-get install curl

```
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following NEW packages will be installed:
  curl
0 upgraded, 1 newly installed, 0 to remove and 5 not upgraded.
Need to get 161 kB of archives.
After this operation, 411 kB of additional disk space will be used.
Get:1 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64
Fetch: 161 kB in 0s (541 kB/s)
Selecting previously unselected package curl.
(Reading database ... 189410 files and directories currently installed.)
Preparing to unpack .../curl_7.68.0-1ubuntu2.6_amd64.deb ...
Unpacking curl (7.68.0-1ubuntu2.6) ...
Setting up curl (7.68.0-1ubuntu2.6) ...
Processing triggers for man-db (2.9.1-1) ...
```

systemwork@ansuman-SYSTEMWORK:~\$ curl https://raw.githubusercontent.com/NextThingCo/CHIP-flasher/master/install.sh | sudo bash

```
% Total % Received % Xferd Average Speed Time Time Time Current
          Dload Upload Total Spent Left Speed
100 11148 100 11148 0 0 24182 0 --:--:-- --:--:-- --:--:-- 24182
====[ Installing for Linux ]====
Hit:1 http://in.archive.ubuntu.com/ubuntu focal InRelease
Hit:2 http://in.archive.ubuntu.com/ubuntu focal-updates InRelease
Hit:3 http://in.archive.ubuntu.com/ubuntu focal-backports InRelease
Hit:4 http://security.ubuntu.com/ubuntu focal-security InRelease
```

```
Reading package lists... Done
Reading package lists... Done
Building dependency tree
Reading state information... Done
Note, selecting 'python-dev-is-python2' instead of 'python-dev'
Package python-pip is not available, but is referred to by another package.
This may mean that the package is missing, has been obsoleted, or
is only available from another source
However the following packages replace it:
  python3-pip
```

```
W: --force-yes is deprecated, use one of the options starting with
--allow instead.
E: Package 'python-pip' has no installation candidate
==> could not install python-pip
```

systemwork@ansuman-SYSTEMWORK:~\$ sudo apt install python3-pip

```
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  binutils binutils-common binutils-x86-64-linux-gnu build-essential
dpkg-dev fakeroot g++ g++-9 gcc gcc-9
  libalgorithm-diff-perl libalgorithm-diff-xs-perl
libalgorithm-merge-perl libasan5 libatomic1 libbinutils
  libctf-nobfd0 libctf0 libexpat1-dev libfakeroot libgcc-9-dev libitm1
liblsan0 libpython3-dev libpython3.8-dev
  libquadmath0 libstdc++-9-dev libtsan0 libubsan1 python-pip-whl
python3-dev python3-distutils python3-setuptools
  python3-wheel python3.8-dev
Suggested packages:
  binutils-doc debian-keyring g++-multilib g++-9-multilib gcc-9-doc
gcc-9-multilib autoconf automake libtool flex
  bison gcc-doc gcc-9-multilib gcc-9-locales libstdc++-9-doc
python3-setuptools-doc
The following NEW packages will be installed:
  binutils binutils-common binutils-x86-64-linux-gnu build-essential
dpkg-dev fakeroot g++ g++-9 gcc gcc-9
  libalgorithm-diff-perl libalgorithm-diff-xs-perl
libalgorithm-merge-perl libasan5 libatomic1 libbinutils
  libctf-nobfd0 libctf0 libexpat1-dev libfakeroot libgcc-9-dev libitm1
liblsan0 libpython3-dev libpython3.8-dev
  libquadmath0 libstdc++-9-dev libtsan0 libubsan1 python-pip-whl
python3-dev python3-distutils python3-pip
  python3-setuptools python3-wheel python3.8-dev
0 upgraded, 36 newly installed, 0 to remove and 5 not upgraded.
Need to get 35.3 MB of archives.
After this operation, 153 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
```

Get:1 <http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 binutils-common amd64 2.34-6ubuntu1.1> [207 kB]
Get:2 <http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 libbinutils amd64 2.34-6ubuntu1.1> [475 kB]
Get:3 <http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 libctf-nobfd0 amd64 2.34-6ubuntu1.1> [47.1 kB]
Get:4 <http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 libctf0 amd64 2.34-6ubuntu1.1> [46.6 kB]
Get:5 <http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 binutils-x86-64-linux-gnu amd64 2.34-6ubuntu1.1> [1,613 kB]
Get:6 <http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 binutils amd64 2.34-6ubuntu1.1> [3,380 B]
Get:7 <http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 libitm1 amd64 10.3.0-1ubuntu1~20.04> [26.2 kB]
Get:8 <http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 libatomic1 amd64 10.3.0-1ubuntu1~20.04> [9,284 B]
Get:9 <http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 libasan5 amd64 9.3.0-17ubuntu1~20.04> [394 kB]
Get:10 <http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 liblsan0 amd64 10.3.0-1ubuntu1~20.04> [835 kB]
Get:11 <http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 libtsan0 amd64 10.3.0-1ubuntu1~20.04> [2,009 kB]
Get:12 <http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 libubsan1 amd64 10.3.0-1ubuntu1~20.04> [784 kB]
Get:13 <http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 libquadmath0 amd64 10.3.0-1ubuntu1~20.04> [146 kB]
Get:14 <http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 libgcc-9-dev amd64 9.3.0-17ubuntu1~20.04> [2,360 kB]
Get:15 <http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 gcc-9 amd64 9.3.0-17ubuntu1~20.04> [8,241 kB]
Get:16 <http://in.archive.ubuntu.com/ubuntu focal/main amd64 gcc amd64 4:9.3.0-1ubuntu2> [5,208 B]
Get:17 <http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 libstdc++-9-dev amd64 9.3.0-17ubuntu1~20.04> [1,714 kB]
Get:18 <http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 g++-9 amd64 9.3.0-17ubuntu1~20.04> [8,405 kB]
Get:19 <http://in.archive.ubuntu.com/ubuntu focal/main amd64 g++ amd64 4:9.3.0-1ubuntu2> [1,604 B]
Get:20 <http://in.archive.ubuntu.com/ubuntu focal/main amd64 dpkg-dev all 1.19.7ubuntu3> [679 kB]
Get:21 <http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 build-essential amd64 12.8ubuntu1.1> [4,664 B]
Get:22 <http://in.archive.ubuntu.com/ubuntu focal/main amd64 libfakeroot amd64 1.24-1> [25.7 kB]
Get:23 <http://in.archive.ubuntu.com/ubuntu focal/main amd64 fakeroot amd64 1.24-1> [62.6 kB]
Get:24 <http://in.archive.ubuntu.com/ubuntu focal/main amd64 libalgorithm-diff-perl all 1.19.03-2> [46.6 kB]
Get:25 <http://in.archive.ubuntu.com/ubuntu focal/main amd64 libalgorithm-diff-xs-perl amd64 0.04-6> [11.3 kB]
Get:26 <http://in.archive.ubuntu.com/ubuntu focal/main amd64 libalgorithm-merge-perl all 0.08-3> [12.0 kB]
Get:27 <http://in.archive.ubuntu.com/ubuntu focal/main amd64 libexpat1-dev amd64 2.2.9-1build1> [116 kB]
Get:28 <http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 libpython3.8-dev amd64 3.8.10-0ubuntu1~20.04> [3,943 kB]
Get:29 <http://in.archive.ubuntu.com/ubuntu focal/main amd64 libpython3-dev amd64 3.8.2-0ubuntu2> [7,236 B]
Get:30 <http://in.archive.ubuntu.com/ubuntu focal-updates/universe amd64 python-pip-whl all 20.0.2-5ubuntu1.6> [1,805 kB]
Get:31 <http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 python3.8-dev amd64 3.8.10-0ubuntu1~20.04> [510 kB]
Get:32 <http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 python3-distutils all 3.8.10-0ubuntu1~20.04> [141 kB]
Get:33 <http://in.archive.ubuntu.com/ubuntu focal/main amd64 python3-dev amd64 3.8.2-0ubuntu2> [1,212 B]
Get:34 <http://in.archive.ubuntu.com/ubuntu focal/main amd64 python3-setuptools all 45.2.0-1> [330 kB]
Get:35 <http://in.archive.ubuntu.com/ubuntu focal/universe amd64 python3-wheel all 0.34.2-1> [23.8 kB]
Get:36 <http://in.archive.ubuntu.com/ubuntu focal-updates/universe amd64 python3-pip all 20.0.2-5ubuntu1.6> [231 kB]
Fetched 35.3 MB in 7s (5,353 kB/s)
Extracting templates from packages: 100%
Selecting previously unselected package binutils-common:amd64.
(Reading database ... 189417 files and directories currently installed.)
Preparing to unpack .../00-binutils-common_2.34-6ubuntu1.1_amd64.deb ...
Unpacking binutils-common:amd64 (2.34-6ubuntu1.1) ...
Selecting previously unselected package libbinutils:amd64.
Preparing to unpack .../01-libbinutils_2.34-6ubuntu1.1_amd64.deb ...
Unpacking libbinutils:amd64 (2.34-6ubuntu1.1) ...
Selecting previously unselected package libctf-nobfd0:amd64.
Preparing to unpack .../02-libctf-nobfd0_2.34-6ubuntu1.1_amd64.deb ...
Unpacking libctf-nobfd0:amd64 (2.34-6ubuntu1.1) ...
Selecting previously unselected package libctf0:amd64.
Preparing to unpack .../03-libctf0_2.34-6ubuntu1.1_amd64.deb ...
Unpacking libctf0:amd64 (2.34-6ubuntu1.1) ...
Selecting previously unselected package binutils-x86-64-linux-gnu.
Preparing to unpack .../04-binutils-x86-64-linux-gnu_2.34-6ubuntu1.1_amd64.deb ...
Unpacking binutils-x86-64-linux-gnu (2.34-6ubuntu1.1) ...
Selecting previously unselected package binutils.
Preparing to unpack .../05-binutils_2.34-6ubuntu1.1_amd64.deb ...
Unpacking binutils (2.34-6ubuntu1.1) ...
Selecting previously unselected package libitm1:amd64.
Preparing to unpack .../06-libitm1_10.3.0-1ubuntu1~20.04_amd64.deb ...
Unpacking libitm1:amd64 (10.3.0-1ubuntu1~20.04) ...
Selecting previously unselected package libatomic1:amd64.
Preparing to unpack .../07-libatomic1_10.3.0-1ubuntu1~20.04_amd64.deb ...
Unpacking libatomic1:amd64 (10.3.0-1ubuntu1~20.04) ...
Selecting previously unselected package libasan5:amd64.
Preparing to unpack .../08-libasan5_9.3.0-17ubuntu1~20.04_amd64.deb ...
Unpacking libasan5:amd64 (9.3.0-17ubuntu1~20.04) ...
Selecting previously unselected package liblsan0:amd64.
Preparing to unpack .../09-liblsan0_10.3.0-1ubuntu1~20.04_amd64.deb ...
Unpacking liblsan0:amd64 (10.3.0-1ubuntu1~20.04) ...
Selecting previously unselected package libtsan0:amd64.
Preparing to unpack .../10-libtsan0_10.3.0-1ubuntu1~20.04_amd64.deb ...
Unpacking libtsan0:amd64 (10.3.0-1ubuntu1~20.04) ...
Selecting previously unselected package libubsan1:amd64.

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Preparing to unpack ../libubsan1_10.3.0-1ubuntu1~20.04_amd64.deb ...
Unpacking libubsan1:amd64 (10.3.0-1ubuntu1~20.04) ...
Selecting previously unselected package libquadmath0:amd64.
Preparing to unpack ../libquadmath0_10.3.0-1ubuntu1~20.04_amd64.deb ...
Unpacking libquadmath0:amd64 (10.3.0-1ubuntu1~20.04) ...
Selecting previously unselected package libgcc-9-dev:amd64.
Preparing to unpack ../libgcc-9-dev_9.3.0-17ubuntu1~20.04_amd64.deb ...
Unpacking libgcc-9-dev:amd64 (9.3.0-17ubuntu1~20.04) ...
Selecting previously unselected package gcc-9.
Preparing to unpack ../gcc-9_9.3.0-17ubuntu1~20.04_amd64.deb ...
Unpacking gcc-9 (9.3.0-17ubuntu1~20.04) ...
Selecting previously unselected package gcc.
Preparing to unpack ../gcc_4%3a9.3.0-1ubuntu2_amd64.deb ...
Unpacking gcc (4:9.3.0-1ubuntu2) ...
Selecting previously unselected package libstdc++-9-dev:amd64.
Preparing to unpack ../libstdc++-9-dev_9.3.0-17ubuntu1~20.04_amd64.deb ...
Unpacking libstdc++-9-dev:amd64 (9.3.0-17ubuntu1~20.04) ...
Selecting previously unselected package g++-9.
Preparing to unpack ../g++-9_9.3.0-17ubuntu1~20.04_amd64.deb ...
Unpacking g++-9 (9.3.0-17ubuntu1~20.04) ...
Selecting previously unselected package g++.
Preparing to unpack ../g++_4%3a9.3.0-1ubuntu2_amd64.deb ...
Unpacking g++ (4:9.3.0-1ubuntu2) ...
Selecting previously unselected package dpkg-dev.
Preparing to unpack ../dpkg-dev_1.19.7ubuntu3_all.deb ...
Unpacking dpkg-dev (1.19.7ubuntu3) ...
Selecting previously unselected package build-essential.
Preparing to unpack ../build-essential_12.8ubuntu1.1_amd64.deb ...
Unpacking build-essential (12.8ubuntu1.1) ...
Selecting previously unselected package libfakeroot:amd64.
Preparing to unpack ../libfakeroot_1.24-1_amd64.deb ...
Unpacking libfakeroot:amd64 (1.24-1) ...
Selecting previously unselected package fakeroot.
Preparing to unpack ../fakeroot_1.24-1_amd64.deb ...
Unpacking fakeroot (1.24-1) ...
Selecting previously unselected package libalgorithm-diff-perl.
Preparing to unpack ../algorithm-diff-perl_1.19.03-2_all.deb ...
Unpacking libalgorithm-diff-perl (1.19.03-2) ...
Selecting previously unselected package libalgorithm-diff-xs-perl.
Preparing to unpack ../algorithm-diff-xs-perl_0.04-6_amd64.deb ...
Unpacking libalgorithm-diff-xs-perl (0.04-6) ...
Selecting previously unselected package libalgorithm-merge-perl.
Preparing to unpack ../algorithm-merge-perl_0.08-3_all.deb ...
Unpacking libalgorithm-merge-perl (0.08-3) ...
Selecting previously unselected package libexpat1-dev:amd64.
Preparing to unpack ../libexpat1-dev_2.2.9-1build1_amd64.deb ...
Unpacking libexpat1-dev:amd64 (2.2.9-1build1) ...
Selecting previously unselected package libpython3.8-dev:amd64.
Preparing to unpack ../libpython3.8-dev_3.8.10-0ubuntu1~20.04_amd64.deb ...
Unpacking libpython3.8-dev:amd64 (3.8.10-0ubuntu1~20.04) ...
Selecting previously unselected package libpython3-dev:amd64.
Preparing to unpack ../libpython3-dev_3.8.2-0ubuntu2_amd64.deb ...
Unpacking libpython3-dev:amd64 (3.8.2-0ubuntu2) ...
Selecting previously unselected package python-pip-whl.
Preparing to unpack ../python-pip-whl_20.0.2-5ubuntu1.6_all.deb ...
Unpacking python-pip-whl (20.0.2-5ubuntu1.6) ...
Selecting previously unselected package python3.8-dev.
Preparing to unpack ../python3.8-dev_3.8.10-0ubuntu1~20.04_amd64.deb ...
Unpacking python3.8-dev (3.8.10-0ubuntu1~20.04) ...
Selecting previously unselected package python3-distutils.
Preparing to unpack ../python3-distutils_3.8.10-0ubuntu1~20.04_all.deb ...
Unpacking python3-distutils (3.8.10-0ubuntu1~20.04) ...
Selecting previously unselected package python3-dev.
Preparing to unpack ../python3-dev_3.8.2-0ubuntu2_amd64.deb ...
Unpacking python3-dev (3.8.2-0ubuntu2) ...
Selecting previously unselected package python3-setuptools.
Preparing to unpack ../python3-setuptools_45.2.0-1_all.deb ...
Unpacking python3-setuptools (45.2.0-1) ...
Selecting previously unselected package python3-wheel.
Preparing to unpack ../python3-wheel_0.34.2-1_all.deb ...
Unpacking python3-wheel (0.34.2-1) ...
Selecting previously unselected package python3-pip.
Preparing to unpack ../python3-pip_20.0.2-5ubuntu1.6_all.deb ...
Unpacking python3-pip (20.0.2-5ubuntu1.6) ...
Setting up python3-distutils (3.8.10-0ubuntu1~20.04) ...
Setting up python3-setuptools (45.2.0-1) ...
Setting up libalgorithm-diff-perl (1.19.03-2) ...
Setting up binutils-common:amd64 (2.34-6ubuntu1.1) ...
Setting up libctf-nobfd0:amd64 (2.34-6ubuntu1.1) ...
Setting up python3-wheel (0.34.2-1) ...
Setting up libfakeroot:amd64 (1.24-1) ...
Setting up fakeroot (1.24-1) ...
update-alternatives: using /usr/bin/fakeroot-sysv to provide
/usr/bin/fakeroot (fakeroot) in auto mode
Setting up libasan5:amd64 (9.3.0-17ubuntu1~20.04) ...
Setting up libexpat1-dev:amd64 (2.2.9-1build1) ...
Setting up libpython3.8-dev:amd64 (3.8.10-0ubuntu1~20.04) ...
Setting up libquadmath0:amd64 (10.3.0-1ubuntu1~20.04) ...
Setting up libatomic1:amd64 (10.3.0-1ubuntu1~20.04) ...
Setting up python3.8-dev (3.8.10-0ubuntu1~20.04) ...
Setting up libubsan1:amd64 (10.3.0-1ubuntu1~20.04) ...
Setting up python-pip-whl (20.0.2-5ubuntu1.6) ...
Setting up libbinutils:amd64 (2.34-6ubuntu1.1) ...
Setting up libalgorithm-diff-xs-perl (0.04-6) ...
Setting up liblsan0:amd64 (10.3.0-1ubuntu1~20.04) ...
Setting up libitm1:amd64 (10.3.0-1ubuntu1~20.04) ...
Setting up libalgorithm-merge-perl (0.08-3) ...
Setting up libtsan0:amd64 (10.3.0-1ubuntu1~20.04) ...
Setting up libctf0:amd64 (2.34-6ubuntu1.1) ...
Setting up libpython3-dev:amd64 (3.8.2-0ubuntu2) ...
Setting up libgcc-9-dev:amd64 (9.3.0-17ubuntu1~20.04) ...
Setting up python3-dev (3.8.2-0ubuntu2) ...
Setting up python3-pip (20.0.2-5ubuntu1.6) ...
Setting up binutils-x86-64-linux-gnu (2.34-6ubuntu1.1) ...
Setting up binutils (2.34-6ubuntu1.1) ...
Setting up dpkg-dev (1.19.7ubuntu3) ...
Setting up gcc-9 (9.3.0-17ubuntu1~20.04) ...
Setting up gcc (4:9.3.0-1ubuntu2) ...
Setting up g++-9 (9.3.0-17ubuntu1~20.04) ...
```

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Setting up g++ (4:9.3.0-1ubuntu2) ...
update-alternatives: using /usr/bin/g++ to provide /usr/bin/c++ (c++)
in auto mode
Setting up build-essential (12.8ubuntu1.1) ...
Processing triggers for man-db (2.9.1-1) ...
Processing triggers for libc-bin (2.31-0ubuntu9.2) ...
systemwork@ansuman-SYSTEMWORK:~$ pip3 --version
pip 20.0.2 from /usr/lib/python3/dist-packages/pip (python 3.8)

systemwork@ansuman-SYSTEMWORK:~$ curl https://raw.githubusercontent.com/NextThingCo/CHIP-flasher/master/install.sh | sudo bash
% Total    % Received % Xferd Average Speed   Time    Time     Time Current
           Dload  Upload  Total   Spent    Left     Speed

100 11148 100 11148    0   0 25051    0 --:--:-- --:--:-- --:--:-- 24995

====[ Installing for Linux ]=====
Hit:1 http://in.archive.ubuntu.com/ubuntu focal InRelease
Hit:2 http://in.archive.ubuntu.com/ubuntu focal-updates InRelease
Hit:3 http://in.archive.ubuntu.com/ubuntu focal-backports InRelease
Hit:4 http://security.ubuntu.com/ubuntu focal-security InRelease
Reading package lists... Done
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  device-tree-compiler libubootenv-tool libubootenv0.1
The following NEW packages will be installed:
  device-tree-compiler libubootenv-tool libubootenv0.1 u-boot-tools
0 upgraded, 4 newly installed, 0 to remove and 5 not upgraded.
Need to get 428 kB of archives.
After this operation, 1,295 kB of additional disk space will be used.
Get:1 http://in.archive.ubuntu.com/ubuntu focal/universe amd64 libubootenv0.1 amd64 0.2-1 [10.1 kB]
Get:2 http://in.archive.ubuntu.com/ubuntu focal/universe amd64 libubootenv-tool amd64 0.2-1 [5,396 B]
Get:3 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 u-boot-tools amd64 2021.01+dfsg-3ubuntu0~20.04.3 [165 kB]
Get:4 http://in.archive.ubuntu.com/ubuntu focal/main amd64 device-tree-compiler amd64 1.5.1-1 [247 kB]
Fetched 428 kB in 0s (1,369 kB/s)
Selecting previously unselected package libubootenv0.1:amd64.
(Reading database ... 191791 files and directories currently installed.)
Preparing to unpack .../libubootenv0.1_0.2-1_amd64.deb ...
Unpacking libubootenv0.1:amd64 (0.2-1) ...
Selecting previously unselected package libubootenv-tool.
Preparing to unpack .../libubootenv-tool_0.2-1_amd64.deb ...
Unpacking libubootenv-tool (0.2-1) ...
Selecting previously unselected package u-boot-tools.
Preparing to unpack .../u-boot-tools_2021.01+dfsg-3ubuntu0~20.04.3_amd64.deb ...
Unpacking u-boot-tools (2021.01+dfsg-3ubuntu0~20.04.3) ...
Selecting previously unselected package device-tree-compiler.
Preparing to unpack .../device-tree-compiler_1.5.1-1_amd64.deb ...
Unpacking device-tree-compiler (1.5.1-1) ...
Setting up libubootenv0.1:amd64 (0.2-1) ...
Setting up device-tree-compiler (1.5.1-1) ...
Setting up u-boot-tools (2021.01+dfsg-3ubuntu0~20.04.3) ...
Setting up libubootenv-tool (0.2-1) ...
Processing triggers for man-db (2.9.1-1) ...
Processing triggers for libc-bin (2.31-0ubuntu9.2) ...
W: --force-yes is deprecated, use one of the options starting with
--allow instead.
Reading package lists... Done
Building dependency tree
Reading state information... Done
Package gksu is not available, but is referred to by another package.
This may mean that the package is missing, has been obsoleted, or
is only available from another source

W: --force-yes is deprecated, use one of the options starting with
--allow instead.
E: Package 'gksu' has no installation candidate
==> could not install gksu!

-----
NOTE: After several try unable to install gksu
-----

systemwork@ansuman-SYSTEMWORK:~$ sudo apt-get install build-essential debhelper dpkg-dev
Reading package lists... Done
Building dependency tree
Reading state information... Done
dpkg-dev is already the newest version (1.19.7ubuntu3).
dpkg-dev set to manually installed.
build-essential is already the newest version (12.8ubuntu1.1).
build-essential set to manually installed.
The following additional packages will be installed:
  autoconf automake autopoint autotools-dev dh-autoreconf
  dh-strip-nondeterminism dwz gettext intltool-debian
  libarchive-cpio-perl libarchive-zip-perl libcroco3 libdebhelper-perl
  libfile-stripnondeterminism-perl libitdl-dev libmail-sendmail-perl
  libsigsegv2 libsub-override-perl libsys-hostname-long-perl libtool m4
  po-debconf
Suggested packages:
  autoconf-archive gnu-standards autoconf-doc dh-make gettext-doc
  libasprintf-dev libgettextpo-dev libtool-doc gfortran | fortran95-compiler gcj-jdk m4-doc libmail-box-perl
The following NEW packages will be installed:
  autoconf automake autopoint autotools-dev debhelper dh-autoreconf
  dh-strip-nondeterminism dwz gettext intltool-debian libarchive-cpio-perl
  libarchive-zip-perl libcroco3 libdebhelper-perl libfile-stripnondeterminism-perl
  libitdl-dev libmail-sendmail-perl libsigsegv2 libsub-override-perl
  libsys-hostname-long-perl libtool m4 po-debconf
0 upgraded, 23 newly installed, 0 to remove and 5 not upgraded.
Need to get 4,338 kB of archives.
After this operation, 14.4 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://in.archive.ubuntu.com/ubuntu focal/main amd64 libsigsegv2 amd64 2.12-2 [13.9 kB]
Get:2 http://in.archive.ubuntu.com/ubuntu focal/main amd64 m4 amd64 1.4.18-4 [199 kB]
Get:3 http://in.archive.ubuntu.com/ubuntu focal/main amd64 autoconf all 2.69-11.1 [321 kB]

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Get:4 <http://in.archive.ubuntu.com/ubuntu> focal/main amd64 autotools-dev all 20180224.1 [39.6 kB]
Get:5 <http://in.archive.ubuntu.com/ubuntu> focal/main amd64 automake all 1:1.16.1-4ubuntu6 [522 kB]
Get:6 <http://in.archive.ubuntu.com/ubuntu> focal/main amd64 autopoint all 0.19.8.1-10build1 [412 kB]
Get:7 <http://in.archive.ubuntu.com/ubuntu> focal/main amd64 libtool all 2.4.6-14 [161 kB]
Get:8 <http://in.archive.ubuntu.com/ubuntu> focal/main amd64 dh-autoreconf all 19 [16.1 kB]
Get:9 <http://in.archive.ubuntu.com/ubuntu> focal/main amd64 libdebhelper-perl all 12.10ubuntu1 [62.1 kB]
Get:10 <http://in.archive.ubuntu.com/ubuntu> focal/main amd64 libarchive-zip-perl all 1.67-2 [90.5 kB]
Get:11 <http://in.archive.ubuntu.com/ubuntu> focal/main amd64 libsub-override-perl all 0.09-2 [9,532 B]
Get:12 <http://in.archive.ubuntu.com/ubuntu> focal/main amd64 libfile-stripnondeterminism-perl all 1.7.0-1 [15.9 kB]
Get:13 <http://in.archive.ubuntu.com/ubuntu> focal/main amd64 dh-strip-nondeterminism all 1.7.0-1 [5,228 B]
Get:14 <http://in.archive.ubuntu.com/ubuntu> focal/main amd64 dwz amd64 0.13-5 [151 kB]
Get:15 <http://in.archive.ubuntu.com/ubuntu> focal/main amd64 libcroco3 amd64 0.6.13-1 [82.5 kB]
Get:16 <http://in.archive.ubuntu.com/ubuntu> focal/main amd64 gettext amd64 0.19.8.1-10build1 [895 kB]
Get:17 <http://in.archive.ubuntu.com/ubuntu> focal/main amd64 intltool-debian all 0.35.0+20060710.5 [24.9 kB]
Get:18 <http://in.archive.ubuntu.com/ubuntu> focal/main amd64 po-debconf all 1.0.21 [233 kB]
Get:19 <http://in.archive.ubuntu.com/ubuntu> focal/main amd64 debhelper all 12.10ubuntu1 [877 kB]
Get:20 <http://in.archive.ubuntu.com/ubuntu> focal/main amd64 libarchive-cpio-perl all 0.10-1 [9,644 B]
Get:21 <http://in.archive.ubuntu.com/ubuntu> focal/main amd64 libltdl-dev amd64 2.4.6-14 [162 kB]
Get:22 <http://in.archive.ubuntu.com/ubuntu> focal/main amd64 libsys-hostname-long-perl all 1.5-1 [11.7 kB]
Get:23 <http://in.archive.ubuntu.com/ubuntu> focal/main amd64 libmail-sendmail-perl all 0.80-1 [22.6 kB]
Fetched 4,338 kB in 1s (3,806 kB/s) Selecting previously unselected package libsigserv2:amd64.
(Reading database ... 191853 files and directories currently installed.)
Preparing to unpack ../00-libsigserv2_2.12-2_amd64.deb ...
Unpacking libsigserv2:amd64 (2.12-2) ...
Selecting previously unselected package m4.
Preparing to unpack ../01-m4_1.4.18-4_amd64.deb ...
Unpacking m4 (1.4.18-4) ...
Selecting previously unselected package autoconf.
Preparing to unpack ../02-autoconf_2.69-11.1_all.deb ...
Unpacking autoconf (2.69-11.1) ...
Selecting previously unselected package autotools-dev.
Preparing to unpack ../03-autotools-dev_20180224.1_all.deb ...
Unpacking autotools-dev (20180224.1) ...
Selecting previously unselected package automake.
Preparing to unpack ../04-automake_1%3a1.16.1-4ubuntu6_all.deb ...
Unpacking automake (1:1.16.1-4ubuntu6) ...
Selecting previously unselected package autopoint.
Preparing to unpack ../05-autopoint_0.19.8.1-10build1_all.deb ...
Unpacking autopoint (0.19.8.1-10build1) ...
Selecting previously unselected package libtool.
Preparing to unpack ../06-libtool_2.4.6-14_all.deb ...
Unpacking libtool (2.4.6-14) ...
Selecting previously unselected package dh-autoreconf.
Preparing to unpack ../07-dh-autoreconf_19_all.deb ...
Unpacking dh-autoreconf (19) ...
Selecting previously unselected package libdebhelper-perl.
Preparing to unpack ../08-libdebhelper-perl_12.10ubuntu1_all.deb ...
Unpacking libdebhelper-perl (12.10ubuntu1) ...
Selecting previously unselected package libarchive-zip-perl.
Preparing to unpack ../09-libarchive-zip-perl_1.67-2_all.deb ...
Unpacking libarchive-zip-perl (1.67-2) ...
Selecting previously unselected package libsub-override-perl.
Preparing to unpack ../10-libsub-override-perl_0.09-2_all.deb ...
Unpacking libsub-override-perl (0.09-2) ...
Selecting previously unselected package libfile-stripnondeterminism-perl.
Preparing to unpack ../11-libfile-stripnondeterminism-perl_1.7.0-1_all.deb ...
Unpacking libfile-stripnondeterminism-perl (1.7.0-1) ...
Selecting previously unselected package dh-strip-nondeterminism.
Preparing to unpack ../12-dh-strip-nondeterminism_1.7.0-1_all.deb ...
Unpacking dh-strip-nondeterminism (1.7.0-1) ...
Selecting previously unselected package dwz.
Preparing to unpack ../13-dwz_0.13-5_amd64.deb ...
Unpacking dwz (0.13-5) ...
Selecting previously unselected package libcroco3:amd64.
Preparing to unpack ../14-libcroco3_0.6.13-1_amd64.deb ...
Unpacking libcroco3:amd64 (0.6.13-1) ...
Selecting previously unselected package gettext.
Preparing to unpack ../15-gettext_0.19.8.1-10build1_amd64.deb ...
Unpacking gettext (0.19.8.1-10build1) ...
Selecting previously unselected package intltool-debian.
Preparing to unpack ../16-intltool-debian_0.35.0+20060710.5_all.deb ...
Unpacking intltool-debian (0.35.0+20060710.5) ...
Selecting previously unselected package po-debconf.
Preparing to unpack ../17-po-debconf_1.0.21_all.deb ...
Unpacking po-debconf (1.0.21) ...
Selecting previously unselected package debhelper.
Preparing to unpack ../18-debhelper_12.10ubuntu1_all.deb ...
Unpacking debhelper (12.10ubuntu1) ...
Selecting previously unselected package libarchive-cpio-perl.
Preparing to unpack ../19-libarchive-cpio-perl_0.10-1_all.deb ...
Unpacking libarchive-cpio-perl (0.10-1) ...
Selecting previously unselected package libltdl-dev:amd64.
Preparing to unpack ../20-libltdl-dev_2.4.6-14_amd64.deb ...
Unpacking libltdl-dev:amd64 (2.4.6-14) ...
Selecting previously unselected package libsys-hostname-long-perl.
Preparing to unpack ../21-libsys-hostname-long-perl_1.5-1_all.deb ...
Unpacking libsys-hostname-long-perl (1.5-1) ...
Selecting previously unselected package libmail-sendmail-perl.
Preparing to unpack ../22-libmail-sendmail-perl_0.80-1_all.deb ...
Unpacking libmail-sendmail-perl (0.80-1) ...
Setting up libarchive-zip-perl (1.67-2) ...
Setting up libdebhelper-perl (12.10ubuntu1) ...
Setting up autotools-dev (20180224.1) ...
Setting up libsigserv2:amd64 (2.12-2) ...
Setting up autopoint (0.19.8.1-10build1) ...
Setting up libcroco3:amd64 (0.6.13-1) ...
Setting up dwz (0.13-5) ...
Setting up libarchive-cpio-perl (0.10-1) ...
Setting up libsub-override-perl (0.09-2) ...
Setting up libsys-hostname-long-perl (1.5-1) ...
Setting up libfile-stripnondeterminism-perl (1.7.0-1) ...
Setting up gettext (0.19.8.1-10build1) ...
Setting up libtool (2.4.6-14) ...
Setting up m4 (1.4.18-4) ...
Setting up intltool-debian (0.35.0+20060710.5) ...
Setting up libmail-sendmail-perl (0.80-1) ...
Setting up autoconf (2.69-11.1) ...
Setting up dh-strip-nondeterminism (1.7.0-1) ...
Setting up automake (1:1.16.1-4ubuntu6) ...
update-alternatives: using /usr/bin/automake-1.16 to provide

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/usr/bin/automake (automake) in auto mode
Setting up po-debconf (1.0.21) ...
Setting up libltdl-dev:amd64 (2.4.6-14) ...
Setting up dh-autoreconf (19) ...
Setting up debhelper (12.10ubuntu1) ...
Processing triggers for man-db (2.9.1-1) ...
Processing triggers for install-info (6.7.0.dfsg.2-5) ...
Processing triggers for libc-bin (2.31-0ubuntu9.2) ...
```

```
systemwork@ansuman-SYSTEMWORK:~$ sudo apt-get install -y gksu
```

```
Reading package lists... Done
```

```
Building dependency tree
```

```
Reading state information... Done
```

```
Package gksu is not available, but is referred to by another package.
```

```
This may mean that the package is missing, has been obsoleted, or
```

```
is only available from another source
```

```
E: Package 'gksu' has no installation candidate
```

```
systemwork@ansuman-SYSTEMWORK:~$ sudo apt-get build-dep gksu
```

```
Reading package lists... Done
```

```
E: You must put some 'deb-src' URIs in your sources.list
```

```
systemwork@ansuman-SYSTEMWORK:~$ cat <<EOF | sudo tee /etc/apt/sources.list.d/artful.list
```

```
> deb http://archive.ubuntu.com/ubuntu/ artful main universe
```

```
> deb-src http://archive.ubuntu.com/ubuntu/ artful main universe
```

```
> EOF
```

```
deb http://archive.ubuntu.com/ubuntu/ artful main universe
```

```
deb-src http://archive.ubuntu.com/ubuntu/ artful main universe
```

```
systemwork@ansuman-SYSTEMWORK:~$ sudo apt-get update
```

```
Hit:1 http://in.archive.ubuntu.com/ubuntu/ focal InRelease
```

```
Hit:2 http://in.archive.ubuntu.com/ubuntu/ focal-updates InRelease
```

```
Hit:3 http://in.archive.ubuntu.com/ubuntu/ focal-backports InRelease
```

```
Ign:4 http://archive.ubuntu.com/ubuntu/ artful InRelease
```

```
Get:5 http://security.ubuntu.com/ubuntu/ focal-security InRelease [114 kB]
```

```
Err:6 http://archive.ubuntu.com/ubuntu/ artful Release 404 Not Found [IP: 91.189.88.142 80]
```

```
Get:7 http://security.ubuntu.com/ubuntu/ focal-security/main amd64 DEP-11 Metadata [27.6 kB]
```

```
Get:8 http://security.ubuntu.com/ubuntu/ focal-security/main amd64 c-n-f Metadata [8,688 B]
```

```
Get:9 http://security.ubuntu.com/ubuntu/ focal-security/universe amd64 DEP-11 Metadata [61.0 kB]
```

```
Get:10 http://security.ubuntu.com/ubuntu/ focal-security/universe amd64 c-n-f Metadata [12.4 kB]
```

```
Get:11 http://security.ubuntu.com/ubuntu/ focal-security/multiverse amd64 DEP-11 Metadata [2,468 B]
```

```
Reading package lists... Done
```

```
E: The repository 'http://archive.ubuntu.com/ubuntu/ artful Release' does not have a Release file.
```

```
N: Updating from such a repository can't be done securely, and is therefore disabled by default.
```

```
N: See apt-secure(8) manpage for repository creation and user configuration details.
```

```
systemwork@ansuman-SYSTEMWORK:~$ sudo apt-get update
```

```
Hit:1 http://in.archive.ubuntu.com/ubuntu/ focal InRelease
```

```
Hit:2 http://in.archive.ubuntu.com/ubuntu/ focal-updates InRelease
```

```
Hit:3 http://in.archive.ubuntu.com/ubuntu/ focal-backports InRelease
```

```
Ign:4 http://archive.ubuntu.com/ubuntu/ artful InRelease
```

```
Get:5 http://security.ubuntu.com/ubuntu/ focal-security InRelease [114 kB]
```

```
Err:6 http://archive.ubuntu.com/ubuntu/ artful Release
```

```
404 Not Found [IP: 91.189.88.142 80]
```

```
Get:7 http://security.ubuntu.com/ubuntu/ focal-security/main amd64
```

```
DEP-11 Metadata [27.6 kB]
```

```
Get:8 http://security.ubuntu.com/ubuntu/ focal-security/main amd64
```

```
c-n-f Metadata [8,688 B]
```

```
Get:9 http://security.ubuntu.com/ubuntu/ focal-security/universe amd64
```

```
DEP-11 Metadata [61.0 kB]
```

```
Get:10 http://security.ubuntu.com/ubuntu/ focal-security/universe amd64
```

```
c-n-f Metadata [12.4 kB]
```

```
Get:11 http://security.ubuntu.com/ubuntu/ focal-security/multiverse
```

```
amd64 DEP-11 Metadata [2,468 B]
```

```
Reading package lists... Done
```

```
E: The repository 'http://archive.ubuntu.com/ubuntu/ artful Release'
```

```
does not have a Release file.
```

```
N: Updating from such a repository can't be done securely, and is
```

```
therefore disabled by default.
```

```
N: See apt-secure(8) manpage for repository creation and user
```

```
configuration details.
```

```
systemwork@ansuman-SYSTEMWORK:~$ cd sunxi-tools
```

```
systemwork@ansuman-SYSTEMWORK:~/sunxi-tools$ dir
```

```
adb-devprobe.sh      fel-sdboot.S      nand-common.h      script_fex.c
autoversion.sh       fel-spiflash.c   nand-image-builder.c script_fex.h
bin                  fel-spiflash.h   nand-part-a10.h     script.h
boot_head.lds        fexc.c           nand-part-a20.h     script_uboot.c
boot_head.S          fexc.h           nand-part.c         script_uboot.h
bootinfo.c           find-arm-gcc.sh  nand-part-main.c    soc_info.c
common.h             fit_image.c      phoenix_info.c      soc_info.h
fel.c               fit_image.h      pio.c               tests
fel-gpio             include          progress.c           thunks
fel_lib.c            jtag-loop.c      progress.h           uart0-helloworld-sdboot.c
fel_lib.h            jtag-loop.lds    README.md            uart0-helloworld-sdboot.lds
fel-remotefunc-compiler.rb jtag-loop.S      script_bin.c         version.h
fel-remotefunc-spi-data-transfer.c LICENSE.md          script_bin.h
fel-remotefunc-spi-data-transfer.h Makefile           script.c
fel-sdboot.lds        meminfo.c        script_extractor.c
```

```
systemwork@ansuman-SYSTEMWORK:~/sunxi-tools$ make
```

```
cc -std=c99 -Wall -Wextra -Wno-unused-result -D_POSIX_C_SOURCE=200112L
```

```
-D_BSD_SOURCE -D_DEFAULT_SOURCE -Iinclude/ -o sunxi-fexc fexc.c
```

```
script.c script_uboot.c script_bin.c script_fex.c
```

```
cc -std=c99 -Wall -Wextra -Wno-unused-result -D_POSIX_C_SOURCE=200112L
```

```
-D_BSD_SOURCE -D_DEFAULT_SOURCE -Iinclude/ -o sunxi-bootinfo
```

```
bootinfo.c
```

```
cc -std=c99 -Wall -Wextra -Wno-unused-result -D_POSIX_C_SOURCE=200112L
```

```
-D_BSD_SOURCE -D_DEFAULT_SOURCE -Iinclude/ -pkg-config --cflags
```

```
libusb-1.0 `pkg-config --cflags zlib` -o sunxi-fel\
```

```
fel.c fit_image.c progress.c soc_info.c fel_lib.c fel-spiflash.c
```

```
`pkg-config --libs libusb-1.0` `pkg-config --libs zlib` -lfdt
```

```
cc -std=c99 -Wall -Wextra -Wno-unused-result -D_POSIX_C_SOURCE=200112L
```

```
-D_BSD_SOURCE -D_DEFAULT_SOURCE -Iinclude/ -c -o nand-part-main.o
```

```
nand-part-main.c
```

```
cc -std=c99 -Wall -Wextra -Wno-unused-result -D_POSIX_C_SOURCE=200112L
```

```
-D_BSD_SOURCE -D_DEFAULT_SOURCE -Iinclude/ -c -o nand-part-a10.o
```

```
nand-part.c -D A10
```

```
nand-part.c: In function '_get_mbr':
```

```
nand-part.c:93:4: warning: 'strncpy' output truncated before
```

```
terminating nul copying 8 bytes from a string of the same length
```

```
[-Wstringop-truncation]
```

```
93 | strncpy((char *)mbr->magic, MBR_MAGIC, 8);
```

```
| ^~~~~~
```

```
cc -std=c99 -Wall -Wextra -Wno-unused-result -D_POSIX_C_SOURCE=200112L
-D_BSD_SOURCE -D_DEFAULT_SOURCE -include/ -c -o nand-part-a20.o
nand-part.c -D A20
nand-part.c: In function 'get_mbr':
nand-part.c:93:4: warning: 'strncpy' output truncated before
terminating nul copying 8 bytes from a string of the same length
[-Wstringop-truncation]
  93 |     strncpy((char *)mbr->magic, MBR_MAGIC, 8);
      |     ^~~~~~
cc -o sunxi-nand-part nand-part-main.o nand-part-a10.o nand-part-a20.o
cc -std=c99 -Wall -Wextra -Wno-unused-result -D_POSIX_C_SOURCE=200112L
-D_BSD_SOURCE -D_DEFAULT_SOURCE -include/ -o sunxi-pio pio.c
ln -nsf sunxi-fexc bin2fexc
ln -nsf sunxi-fexc fexc2bin
```

Real work started

```
systemwork@ansuman-SYSTEMWORK:~$ sudo apt install sunxi-tools
[sudo] password for systemwork:
Reading package lists... Done
Building dependency tree
Reading state information... Done
Recommended packages:
  u-boot-sunxi:armhf
The following NEW packages will be installed:
  sunxi-tools
0 upgraded, 1 newly installed, 0 to remove and 5 not upgraded.
Need to get 47.4 kB of archives.
After this operation, 171 kB of additional disk space will be used.
Get:1 http://in.archive.ubuntu.com/ubuntu/focal/universe/amd64
sunxi-tools amd64 1.4.2+git20181114.6d598a-3 [47.4 kB]
Fetched 47.4 kB in 1s (84.9 kB/s)
Selecting previously unselected package sunxi-tools.
(Reading database ... 193098 files and directories currently installed.)
Preparing to unpack .../sunxi-tools_1.4.2+git20181114.6d598a-3_amd64.deb ...
Unpacking sunxi-tools (1.4.2+git20181114.6d598a-3) ...
Setting up sunxi-tools (1.4.2+git20181114.6d598a-3) ...
systemwork@ansuman-SYSTEMWORK:~$ sunxi-fel -v ver
AWUSBFE soc=00001625(A13) 00000001 ver=0001 44 08 scratchpad=00007e00
00000000 00000000
systemwork@ansuman-SYSTEMWORK:~$ lsusb | grep Onda
Bus 003 Device 013: ID 1f3a:efe8 Onda (unverified) V972 tablet in flashing mode
systemwork@ansuman-SYSTEMWORK:~$ dir
Desktop Documents Downloads Music Pictures Public sunxi-tools
Templates Videos working-CHIP-tools
systemwork@ansuman-SYSTEMWORK:~$ cd working-CHIP-tools
systemwork@ansuman-SYSTEMWORK:~/working-CHIP-tools$ sudo
./chip-update-firmware.sh
sudo: ./chip-update-firmware.sh: command not found
systemwork@ansuman-SYSTEMWORK:~/working-CHIP-tools$ ./chip-update-firmware.sh
bash: ./chip-update-firmware.sh: Permission denied
systemwork@ansuman-SYSTEMWORK:~/working-CHIP-tools$ bash
./chip-update-firmware.sh
Error: Unable to locate sunxi-nand-image-builder utility.
Install sunxi-nand-image-builder with:
CHIP-SDK setup script (https://github.com/nicmorais/working-CHIP-SDK)

systemwork@ansuman-SYSTEMWORK:~/working-CHIP-tools$ cd ..
systemwork@ansuman-SYSTEMWORK:~$ sudo apt install sunxi-nand-image-builder
Reading package lists... Done
Building dependency tree
Reading state information... Done
E: Unable to locate package sunxi-nand-image-builder
systemwork@ansuman-SYSTEMWORK:~$ apt-get install sunxi-tools
E: Could not open lock file /var/lib/dpkg/lock-frontent - open (13:
Permission denied)
E: Unable to acquire the dpkg frontend lock
(/var/lib/dpkg/lock-frontent), are you root?
systemwork@ansuman-SYSTEMWORK:~$ sudo apt-get install sunxi-tools
Reading package lists... Done
Building dependency tree
Reading state information... Done
sunxi-tools is already the newest version (1.4.2+git20181114.6d598a-3).
0 upgraded, 0 newly installed, 0 to remove and 5 not upgraded.
systemwork@ansuman-SYSTEMWORK:~$ cd sunxi-tools
systemwork@ansuman-SYSTEMWORK:~/sunxi-tools$ sudo make install
install -d /usr/local/bin
+ install -m0755 sunxi-fexc /usr/local/bin/sunxi-fexc
+ install -m0755 sunxi-bootinfo /usr/local/bin/sunxi-bootinfo
+ install -m0755 sunxi-fel /usr/local/bin/sunxi-fel
+ install -m0755 sunxi-nand-part /usr/local/bin/sunxi-nand-part
+ install -m0755 sunxi-pio /usr/local/bin/sunxi-pio
+ ln -fs sunxi-fexc /usr/local/bin/bin2fexc
+ ln -fs sunxi-fexc /usr/local/bin/fexc2bin
systemwork@ansuman-SYSTEMWORK:~/sunxi-tools$ sudo make install-misc
cc -std=c99 -Wall -Wextra -Wno-unused-result -D_POSIX_C_SOURCE=200112L
-D_BSD_SOURCE -D_DEFAULT_SOURCE -include/ -o phoenix_info
phoenix_info.c
cc -std=c99 -Wall -Wextra -Wno-unused-result -D_POSIX_C_SOURCE=200112L
-D_BSD_SOURCE -D_DEFAULT_SOURCE -include/ -o
sunxi-nand-image-builder nand-image-builder.c
install -d /usr/local/bin
+ install -m0755 phoenix_info /usr/local/bin/phoenix_info
+ install -m0755 sunxi-nand-image-builder
/usr/local/bin/sunxi-nand-image-builder
systemwork@ansuman-SYSTEMWORK:~/sunxi-tools$ cd ..
systemwork@ansuman-SYSTEMWORK:~$ git clone https://github.com/Thore-Krug/Flash-CHIP
Cloning into 'Flash-CHIP'...
remote: Enumerating objects: 94, done.
remote: Total 94 (delta 0), reused 0 (delta 0), pack-reused 94
Unpacking objects: 100% (94/94), 27.18 KiB | 1.01 MiB/s, done.
systemwork@ansuman-SYSTEMWORK:~$ dir
Desktop Downloads Music Public Templates working-CHIP-tools
Documents Flash-CHIP Pictures sunxi-tools Videos
systemwork@ansuman-SYSTEMWORK:~$ cd Flash-CHIP
systemwork@ansuman-SYSTEMWORK:~/Flash-CHIP$ sudo chmod +x Flash.sh
```

systemwork@ansuman-SYSTEMWORK:~/Flash-CHIPS ./Flash.sh

```
# # #
#####
###   ###
# {#} #
###  \#####
#   #
###   ###
#####
# # #
```

Welcome to the C.H.I.P Flasher Tool

Please enter your wanted flavour

+++++
enter p for pocketchip Image
enter s for the headless Server Image
enter g for the Desktop Image
enter b for the Buildroot Image
+++++

IMPORTANT INFO

If u suffer from Power Problems add a n

to your choice of flavour

Example: gn for the No-Limit Desktop Image

+++++

Other options

+++++

enter f for Force Clean

+++++

Then press enter please

g

Setting up environment

Hit:1 <http://in.archive.ubuntu.com/ubuntu> focal InRelease

Get:2 <http://in.archive.ubuntu.com/ubuntu> focal-updates InRelease [114 kB]

Get:3 <http://in.archive.ubuntu.com/ubuntu> focal-backports InRelease [101 kB]

Get:4 <http://in.archive.ubuntu.com/ubuntu> focal-updates/main amd64

Packages [1,205 kB]

Get:5 <http://security.ubuntu.com/ubuntu> focal-security InRelease [114 kB]

Get:6 <http://in.archive.ubuntu.com/ubuntu> focal-updates/main i386

Packages [532 kB]

Get:7 <http://in.archive.ubuntu.com/ubuntu> focal-updates/main

Translation-en [258 kB]

Get:8 <http://in.archive.ubuntu.com/ubuntu> focal-updates/main amd64

DEP-11 Metadata [282 kB]

Ign:9 <http://archive.ubuntu.com/ubuntu> artful InRelease

Get:10 <http://in.archive.ubuntu.com/ubuntu> focal-updates/main amd64

c-n-f Metadata [14.1 kB]

Get:11 <http://in.archive.ubuntu.com/ubuntu> focal-updates/universe

amd64 Packages [855 kB]

Get:12 <http://in.archive.ubuntu.com/ubuntu> focal-updates/universe i386

Packages [632 kB]

Get:13 <http://in.archive.ubuntu.com/ubuntu> focal-updates/universe

Translation-en [181 kB]

Get:14 <http://in.archive.ubuntu.com/ubuntu> focal-updates/universe

amd64 DEP-11 Metadata [351 kB]

Err:15 <http://archive.ubuntu.com/ubuntu> artful Release

404 Not Found [IP: 91.189.88.152 80]

Get:16 <http://in.archive.ubuntu.com/ubuntu> focal-updates/universe

amd64 c-n-f Metadata [18.8 kB]

Get:17 <http://in.archive.ubuntu.com/ubuntu> focal-updates/multiverse

amd64 DEP-11 Metadata [944 B]

Get:18 <http://in.archive.ubuntu.com/ubuntu> focal-backports/universe

amd64 DEP-11 Metadata [10.3 kB]

Reading package lists... Done

E: The repository '<http://archive.ubuntu.com/ubuntu> artful Release'

does not have a Release file.

N: Updating from such a repository can't be done securely, and is

therefore disabled by default.

N: See apt-secure(8) manpage for repository creation and user

configuration details.

Reading package lists... Done

Building dependency tree

Reading state information... Done

wget is already the newest version (1.20.3-1ubuntu1).

wget set to manually installed.

adb is already the newest version (1:8.1.0+r23-5ubuntu2).

adb set to manually installed.

android-tools-fastboot is already the newest version (1:8.1.0+r23-5ubuntu2).

fastboot is already the newest version (1:8.1.0+r23-5ubuntu2).

fastboot set to manually installed.

sunxi-tools is already the newest version (1.4.2+git20181114.6d598a-3).

curl is already the newest version (7.68.0-1ubuntu2.6).

git is already the newest version (1:2.25.1-1ubuntu3.1).

u-boot-tools is already the newest version (2021.01+dfsg-3ubuntu0~20.04.3).

0 upgraded, 0 newly installed, 0 to remove and 5 not upgraded.

Adding current user to dialout group

Adding current user to plugdev group

Adding udev rule for Allwinner device

SUBSYSTEM=="usb", ATTRS{idVendor}=="1f3a", ATTRS{idProduct}=="efe8",

GROUP="plugdev", MODE="0660" SYMLINK+="usb-chip"

SUBSYSTEM=="usb", ATTRS{idVendor}=="18d1", ATTRS{idProduct}=="1010",

GROUP="plugdev", MODE="0660" SYMLINK+="usb-chip-fastboot"

SUBSYSTEM=="usb", ATTRS{idVendor}=="1f3a", ATTRS{idProduct}=="1010",

GROUP="plugdev", MODE="0660" SYMLINK+="usb-chip-fastboot"

SUBSYSTEM=="usb", ATTRS{idVendor}=="067b", ATTRS{idProduct}=="2303",

GROUP="plugdev", MODE="0660" SYMLINK+="usb-serial-adapter"

Installing CHIP-tools

Cloning into 'CHIP-tools'...

remote: Enumerating objects: 554, done.

remote: Total 554 (delta 0), reused 0 (delta 0), pack-reused 554

Receiving objects: 100% (554/554), 129.52 KiB | 157.00 KiB/s, done.

Resolving deltas: 100% (324/324), done.

== Gui selected ==

```
== preparing images ==
== New image available ==
== Downloading.. ==
--2021-09-08 21:26:29--
http://chip.impossibilities.com/chip/images/stable/qui/149/spl-40000-1000-100.bin
Resolving chip.impossibilities.com (chip.impossibilities.com)...
23.239.1.46, 2600:3c01::f03c:91ff:fe08:29a3
Connecting to chip.impossibilities.com
(chip.impossibilities.com)[23.239.1.46]:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 278528 (272K) [application/octet-stream]
Saving to: 'spl-40000-1000-100.bin'

spl-40000-1000-100.bin
100%[=====] 272.00K
246KB/s in 1.1s

2021-09-08 21:26:31 (246 KB/s) - 'spl-40000-1000-100.bin' saved [278528/278528]

--2021-09-08 21:26:31--
http://chip.impossibilities.com/chip/images/stable/qui/149/spl-400000-4000-500.bin
Resolving chip.impossibilities.com (chip.impossibilities.com)...
23.239.1.46, 2600:3c01::f03c:91ff:fe08:29a3
Connecting to chip.impossibilities.com
(chip.impossibilities.com)[23.239.1.46]:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 4521984 (4.3M) [application/octet-stream]
Saving to: 'spl-400000-4000-500.bin'

spl-400000-4000-500.bin
100%[=====] 4.31M
1.55MB/s in 2.8s

2021-09-08 21:26:34 (1.55 MB/s) - 'spl-400000-4000-500.bin' saved
[4521984/4521984]

--2021-09-08 21:26:34--
http://chip.impossibilities.com/chip/images/stable/qui/149/spl-400000-4000-680.bin
Resolving chip.impossibilities.com (chip.impossibilities.com)...
23.239.1.46, 2600:3c01::f03c:91ff:fe08:29a3
Connecting to chip.impossibilities.com
(chip.impossibilities.com)[23.239.1.46]:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 4620288 (4.4M) [application/octet-stream]
Saving to: 'spl-400000-4000-680.bin'

spl-400000-4000-680.bin
100%[=====] 4.41M
470KB/s in 15s

2021-09-08 21:26:50 (295 KB/s) - 'spl-400000-4000-680.bin' saved
[4620288/4620288]

--2021-09-08 21:26:50--
http://chip.impossibilities.com/chip/images/stable/qui/149/sunxi-spl.bin
Resolving chip.impossibilities.com (chip.impossibilities.com)...
23.239.1.46, 2600:3c01::f03c:91ff:fe08:29a3
Connecting to chip.impossibilities.com
(chip.impossibilities.com)[23.239.1.46]:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 16384 (16K) [application/octet-stream]
Saving to: 'sunxi-spl.bin'

sunxi-spl.bin
100%[=====] 16.00K
57.0KB/s in 0.3s

2021-09-08 21:26:51 (57.0 KB/s) - 'sunxi-spl.bin' saved [16384/16384]

--2021-09-08 21:26:51--
http://chip.impossibilities.com/chip/images/stable/qui/149/u-boot-dtb.bin
Resolving chip.impossibilities.com (chip.impossibilities.com)...
23.239.1.46, 2600:3c01::f03c:91ff:fe08:29a3
Connecting to chip.impossibilities.com
(chip.impossibilities.com)[23.239.1.46]:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 625858 (611K) [application/octet-stream]
Saving to: 'u-boot-dtb.bin'

u-boot-dtb.bin
100%[=====] 611.19K
432KB/s in 1.4s

2021-09-08 21:26:53 (432 KB/s) - 'u-boot-dtb.bin' saved [625858/625858]

--2021-09-08 21:26:53--
http://chip.impossibilities.com/chip/images/stable/qui/149/uboot-40000.bin
Resolving chip.impossibilities.com (chip.impossibilities.com)...
23.239.1.46, 2600:3c01::f03c:91ff:fe08:29a3
Connecting to chip.impossibilities.com
(chip.impossibilities.com)[23.239.1.46]:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 786432 (768K) [application/octet-stream]
Saving to: 'uboot-40000.bin'

uboot-40000.bin
100%[=====] 768.00K
143KB/s in 5.4s

2021-09-08 21:26:59 (143 KB/s) - 'uboot-40000.bin' saved [786432/786432]

--2021-09-08 21:26:59--
http://chip.impossibilities.com/chip/images/stable/qui/149/uboot-400000.bin
Resolving chip.impossibilities.com (chip.impossibilities.com)...
23.239.1.46, 2600:3c01::f03c:91ff:fe08:29a3
Connecting to chip.impossibilities.com
(chip.impossibilities.com)[23.239.1.46]:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 4194304 (4.0M) [application/octet-stream]
Saving to: 'uboot-400000.bin'
```

uboot-400000.bin
100%[=====>] 4.00M
342KB/s in 11s

2021-09-08 21:27:11 (364 KB/s) - 'uboot-400000.bin' saved [4194304/4194304]

== Staging for NAND probe ==
Image Name: detect NAND
Created: Wed Sep 8 21:27:11 2021
Image Type: ARM Linux Script (uncompressed)
Data Size: 97 Bytes = 0.09 KiB = 0.00 MiB
Load Address: 00000000
Entry Point: 00000000
Contents:
Image 0: 89 Bytes = 0.09 KiB = 0.00 MiB
waiting for fel...OK
waiting for fel....OK
NAND detected:
nand_erasize=400000
nand_oobsize=680
nand_writesize=4000
== Downloading new UBI, this will be cached for future flashes. ==
--2021-09-08 21:27:28--
<http://chip.ifpossibilities.com/chip/images/stable/qui/149/chip-400000-4000-680.ubi.sparse>
Resolving chip.ifpossibilities.com (chip.ifpossibilities.com)...
23.239.1.46, 2600:3c01::f03c:91ff:fe08:29a3
Connecting to chip.ifpossibilities.com
(chip.ifpossibilities.com)|23.239.1.46|80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 687865896 (656M)
Saving to: 'chip-400000-4000-680.ubi.sparse'

chip-400000-4000-680.ubi.spa
100%[=====>] 656.00M
462KB/s in 33m 43s

2021-09-08 22:01:12 (332 KB/s) - 'chip-400000-4000-680.ubi.sparse'
saved [687865896/687865896]

Image Name: flash gui
Created: Wed Sep 8 22:01:12 2021
Image Type: ARM Linux Script (uncompressed)
Data Size: 1784 Bytes = 1.74 KiB = 0.00 MiB
Load Address: 00000000
Entry Point: 00000000
Contents:
Image 0: 1776 Bytes = 1.73 KiB = 0.00 MiB
waiting for fel...[sudo] password for systemwork:
OK
waiting for fastboot.....OK
target reported max download size of 33554432 bytes
sending sparse 'UBI 1/24 (28672 KB)...
OKAY [2.013s]
writing 'UBI 1/24...
OKAY [2.101s]
sending sparse 'UBI 2/24 (28672 KB)...
OKAY [2.015s]
writing 'UBI 2/24...
OKAY [5.571s]
sending sparse 'UBI 3/24 (28672 KB)...
OKAY [2.005s]
writing 'UBI 3/24...
OKAY [12.535s]
sending sparse 'UBI 4/24 (28672 KB)...
OKAY [1.996s]
writing 'UBI 4/24...
OKAY [12.535s]
sending sparse 'UBI 5/24 (28672 KB)...
OKAY [1.953s]
writing 'UBI 5/24...
OKAY [12.525s]
sending sparse 'UBI 6/24 (28672 KB)...
OKAY [2.001s]
writing 'UBI 6/24...
OKAY [12.537s]
sending sparse 'UBI 7/24 (28672 KB)...
OKAY [1.997s]
writing 'UBI 7/24...
OKAY [12.527s]
sending sparse 'UBI 8/24 (28672 KB)...
OKAY [1.951s]
writing 'UBI 8/24...
OKAY [12.539s]
sending sparse 'UBI 9/24 (28672 KB)...
OKAY [1.992s]
writing 'UBI 9/24...
OKAY [12.532s]
sending sparse 'UBI 10/24 (28672 KB)...
OKAY [1.970s]
writing 'UBI 10/24...
OKAY [12.525s]
sending sparse 'UBI 11/24 (28672 KB)...
OKAY [1.997s]
writing 'UBI 11/24...
OKAY [12.536s]
sending sparse 'UBI 12/24 (28672 KB)...
OKAY [2.018s]
writing 'UBI 12/24...
OKAY [12.537s]
sending sparse 'UBI 13/24 (28672 KB)...
OKAY [2.012s]
writing 'UBI 13/24...
OKAY [12.535s]
sending sparse 'UBI 14/24 (28672 KB)...
OKAY [1.977s]
writing 'UBI 14/24...
OKAY [12.531s]
sending sparse 'UBI 15/24 (28672 KB)...
OKAY [1.973s]

```
writing 'UBI' 15/24...
OKAY [ 12.528s]
sending sparse 'UBI' 16/24 (28672 KB)...
OKAY [  1.989s]
writing 'UBI' 16/24...
OKAY [ 12.527s]
sending sparse 'UBI' 17/24 (28672 KB)...
OKAY [  2.008s]
writing 'UBI' 17/24...
OKAY [ 12.528s]
sending sparse 'UBI' 18/24 (28672 KB)...
OKAY [  1.974s]
writing 'UBI' 18/24...
OKAY [ 12.525s]
sending sparse 'UBI' 19/24 (28672 KB)...
OKAY [  2.013s]
writing 'UBI' 19/24...
OKAY [ 12.530s]
sending sparse 'UBI' 20/24 (28672 KB)...
OKAY [  1.987s]
writing 'UBI' 20/24...
OKAY [ 12.532s]
sending sparse 'UBI' 21/24 (28672 KB)...
OKAY [  1.974s]
writing 'UBI' 21/24...
OKAY [ 12.523s]
sending sparse 'UBI' 22/24 (28672 KB)...
OKAY [  1.998s]
writing 'UBI' 22/24...
OKAY [ 12.532s]
sending sparse 'UBI' 23/24 (28672 KB)...
OKAY [  2.002s]
writing 'UBI' 23/24...
OKAY [  9.725s]
sending sparse 'UBI' 24/24 (12288 KB)...
OKAY [  0.854s]
writing 'UBI' 24/24...
OKAY [  2.809s]
finished. total time: 317.499s
resuming boot...
OKAY [  0.000s]
finished. total time: 0.000s
```

FLASH VERIFICATION COMPLETE.

```
# # #
#####
###  ###
# {#} #
### '%#####
#  #
###  ###
#####
# # #
```

CHIP is ready to roll!

TAGS: [C.H.I.P. Flashing](#), [Ubuntu 20.04.3 LTS \(Focal Fossa\)](#), [Next Thing Co.](#)