

## Additional Information

This section describes additional information regarding previous done tasks which are not necessary to know at following the guide but good to know for further work as mentioned in page "[Board bring-up overview for TEI0022](#)".

## Device Tree Blob

The device tree blob is generated previously. It is possible to generate the device tree as human readable as well and it is possible to convert both versions to each other. This is explained in the next three sections.

### Generate .dtb or .dts file from .sopcinfo file

As mentioned earlier, it is possible to generate the device tree blob from the .sopcinfo file via `sopc2dts --input <input name>.sopcinfo --output <output name>.dtb --type dtb --board hps_common_board_info.xml --bridge-removal all --clocks`

The short version of this command is `sopc2dts -i <input name>.sopcinfo -o <output name>.dtb -t dtb --board hps_common_board_info.xml --bridge-removal all --clocks`

To generate the device tree as human readable run `sopc2dts -i <input name>.sopcinfo -o <output name>.dts -t dts --board hps_common_board_info.xml --bridge-removal all --clocks`

### Generate .dtb file from .dts file

If the device tree is available as .dts file it is possible to generate a .dtb file via `dtc -I dts -O dtb -o <device tree name>.dtb <device tree name>.dts`

### Generate .dts file from .dtb file

If the device tree is available as .dtb file it is possible to generate a .dts file via `dtc -I dtb -O dts -o <device tree name>.dts <device tree name>.dtb`

## Autoformatting the SD card

The formatting instructions in the guide can be automated. To do this the information regarding the partitions is needed in a file. This file has to look like the following example file.

### Partitioning

```
unit: sectors

/dev/sdb1 : start= 2048,      size= 204800,  Id= c
/dev/sdb2 : start= 206848,  size= 4096000, Id=83
/dev/sdb3 : start= 4302848, size= 4096,    Id=a2
```

**Attention: As mentionend in the guide, if the wrong identifier is selected, the following commands can destroy the host system! Therefore, be aware to use the correct identifier.**

To use this file, it is necessary to change sdb to the previous identified name of the used SD card, adapt the start and size values if necessary, and save it as file. This is crucial.

After that, unmount all SD card partitions via `sudo umount /dev/sdXXX`

Now, format the SD card via `sudo sfdisk /dev/sdXXX < <above generated file for SD card formatting>`

If the SD card formatting should be read from the SD card into a file use ***sudo sfdisk -d /dev/sdXXX > <output file>***