

## How to add a new project

### 1. Add project folder

- 1) meta/base/conf/mt8516/<new project>

New a folder for <new project > under meta/base/conf/mt8516

Copy bblayser.conf.sample and local.conf.sample from a parent project.

Ex:

```
meta/base/conf/mt8516/aud8516p1v2-consysp-slc
```

```
meta/base/conf/mt8516/aud8516p1v2-consysp-slc/bblayser.conf.sample
```

```
meta/base/conf/mt8516/aud8516p1v2-consysp-slc/local.conf.sample
```

- 2) Set MACHINE in local.conf.sample  
MACHINE ??= "<new project name>"

Ex:

```
$ vim meta/base/conf/mt8516/aud8516p1v2-consysp-slc/local.conf.sample
```

```
$ MACHINE ??= "<aud8516p1v2-consysp-slc>"
```

```
$ :wq
```

### 2. Add machine conf

- 1) New a meta/meta-mediatek-aud/conf/machine/\${new project}.conf

Ex: meta/meta-mediatek-aud/conf/machine/aud8516p1v2-consysp-slc.conf

- 2) Set MACHINE in aud8516p1v2-consysp-slc.conf  
MACHINE ??= "<new project name>"

Ex:

```
$ vim meta/meta-mediatek-aud/conf/machine/aud8516p1v2-consysp-slc.conf
```

```
$ MACHINE ??= "<aud8516p1v2-consysp-slc>"
```

```
$ :wq
```

- 3) Set kernel config and dts

```
KBUILD_DEFCONFIG = "aud8516p1v2_consyp_slc_yocto_debug_defconfig"  
KERNEL_DEVICETREE = "aud8516p1v2_consyp_slc_yocto.dtb"
```

- 4) set kernel version in machine conf

```
PREFERRED_VERSION_linux-mtk-extension ?= "4.4%"
```

### 3. Add dts and defconfig for kernel

- 1).add \*.dts and add obj-y in Makefile for new \*.dts.

Project alps/kernel-4.4

arch/arm64/boot/dts/mediatek/Makefile

A arch/arm64/boot/dts/mediatek/aud8516p1v2\_consyp\_slc\_yocto.dts

- 2).set bootargs in dts

```
root=ubi0:aud8516p1v2-consysp-slc-rootfs
```

- 3).add defconf

```
Project alps/kernel-4.4
 arch/arm64/configs/aud8516p1v2_consys_slc_yocto_debug_defconfig
 arch/arm64/configs/aud8516p1v2_consys_slc_yocto_defconfig
```

#### 4. Add NVRAM related config

There is a NVRAM customer default setting at src/apps/aud-base/main/custom/<project name>

Ex:

```
src/apps/aud-base/main/custom/aud8516p1v2-slc/**
src/apps/aud-base/main/custom/ aud8516p1-slc/**
```

Add a new one for <new project>, cp from another.

Ex:

```
$ cp -arf src/apps/aud-base/main/custom/aud8516p1v2-slc \
src/apps/aud-base/main/custom/aud8516p1v2-consys-slc
```

#### 5. Add lk2.0 configs

Add lk project and target for new project.

```
$ cd src/bsp/lk
$ cp project/aud8516p1v2-slc.mk project/aud8516p1v2-consys-slc.mk
$ cp -arf target/aud8516p1v2-slc target/aud8516p1v2-consys-slc
```

Set TARGET :=<new project> in aud8516p1v2-consys-slc.mk

```
$ vim project/aud8516p1v2-slc.mk project/aud8516p1v2-consys-slc.mk
$ TARGET := aud8516p1v2-consys-slc
$:wq
```

#### 6. Add partition table for <new project>

```
$ cd src/bsp/scatter
$ cp -arf project/aud8516p1v2-slc project/aud8516p1v2-consys-slc
```

Add partition related file for new project.

#### 7. Add flashtool

Add fastboot script(flashproc.py).

```
$ cd meta/meta-mediatek/recipes-devtools/flashtool/flashtool
$ cp -arf aud8516p1v2-slc aud8516p1v2-consys-slc
```

#### 8. New project build.

```
export TEMPLATECONF=${PWD}/meta/base/conf/mt8516/<new project>
source meta/poky/oe-init-build-env
bitbake mtk-image-aud-8516
```