

## Lab – Using Dynamic Debug

1. connect to the target and send wav file to the sd card

```
adb push a.wav /sdcard/Music
```

2. the following files can be use for trace:

```
sound/soc/soc-core.c
sound/soc/soc-dapm.c
sound/soc/soc-cache.c
sound/soc/soc-pcm.c
sound/soc/soc-compress.c
sound/soc/codecs/msm_hdmi_codec_rx.c
sound/soc/codecs/wcd9xxx-resmgr.c
sound/soc/codecs/wcd9320.c
sound/soc/codecs/wcd9xxx-mbhc.c
sound/soc/codecs/wcd9xxx-common.c
sound/soc/codecs/msm_stub.c
sound/soc/msm/msm-pcm-hostless.c
sound/soc/msm/qdsp6v2/msm-dai-q6-v2.c
sound/soc/msm/qdsp6v2/msm-pcm-q6-v2.c
sound/soc/msm/qdsp6v2/msm-pcm-routing-v2.c
sound/soc/msm/qdsp6v2/msm-compress-q6-v2.c
sound/soc/msm/qdsp6v2/msm-compr-q6-v2.c
sound/soc/msm/qdsp6v2/msm-multi-ch-pcm-q6-v2.c
sound/soc/msm/qdsp6v2/msm-pcm-lpa-v2.c
sound/soc/msm/qdsp6v2/msm-pcm-afe-v2.c
sound/soc/msm/qdsp6v2/msm-pcm-voip-v2.c
sound/soc/msm/qdsp6v2/msm-pcm-voice-v2.c
sound/soc/msm/qdsp6v2/msm-dai-q6-hdmi-v2.c
sound/soc/msm/qdsp6v2/msm-lsm-client.c
sound/soc/msm/qdsp6v2/msm-pcm-dtmf-v2.c
sound/soc/msm/qdsp6v2/msm-dai-stub-v2.c
sound/soc/msm/qdsp6v2/q6adm.c
sound/soc/msm/qdsp6v2/q6afe.c
sound/soc/msm/qdsp6v2/q6asm.c
sound/soc/msm/qdsp6v2/q6voice.c
sound/soc/msm/qdsp6v2/q6core.c
sound/soc/msm/qdsp6v2/audio_acdb.c
sound/soc/msm/qdsp6v2/rtac.c
sound/soc/msm/qdsp6v2/q6lsm.c
sound/soc/msm/qdsp6v2/audio_ocmem.c
sound/soc/msm/msm8974.c
sound/soc/msm/msm-dai-fe.c
```

3. to add a file to the trace use the following command:

```
echo -n "file msm8974.c +p" > /d/dynamic_debug/control
```

4. to see the trace use one of:

```
# dmesg
# cat /proc/kmsg
# cat /proc/kmsg | grep msm8974
```

5. to disable use -p in the above command

6. change the trace file to wcd9320.c, play the file

7. change the trace file to soc-dapm.c, play the file

#### Add dynamic debug to the boot process

1. add the query to the kernel command line in: BoardConfig.mk

```
ddebug_query=\"file soc-core.c +p\"
```

#### Commands to build the kernel

```
# cd ~/aosp
# source build/envsetup.sh
# lunch 8
# cd kernel
# ##### make code changes
# make
# cp arch/arm/boot/zImage-dtb ../device/lge/hammerhead-kernel
# cd ~/aosp
# make
# adb reboot bootloader
# fastboot -w flashall
```