

1. Ram dump is disabled on a secure boot device for security reason. To get ramdump on a secure boot enabled device:

* Sign images with debug OU field on

or

Modify trustzone_images/core/securemsm/trustzone/qsee/kernel/src/tzbsp_dload_mode.c as below:

```
boolean tzbsp_allow_memory_dump()
{
#ifdef FEATURE_DLOAD_MEM_DEBUG
if(tzbsp_is_dload_mode_set())
{
return TRUE;
}
#endif
/* By default memory dumping is denied. */
return FALSE;
}

int tzbsp_security_allows_mem_dump(uint32 *rsp, uint32 rsplen)
{
/* Ensure the response buffer is in non-secure memory and is large
* enough to handle the response */
if(rsplen < sizeof(uint32))
{
return -E_INVALID_ARG;
}
if(!tzbsp_is_ns_range(rsp, rsplen))
{
return -E_BAD_ADDRESS;
}
/* Populate the response and return success */
*rsp = (uint32)(TRUE);
return E_SUCCESS;
}
```

* Modify trustzone_images/core/securemsm/trustzone/qsee/arch/msm8974/src/tzbsp_sec_core.c :
tzbsp_allow_unlock_xpu() to return true.

2. When you need modem ramdump, you also need a following change in addition to the above.

* Modify modem_proc/core/securemsm/mba/src/oem/oem_mba_ac.c : mba_oem_secctrl_allow_unlock_xpu()
) to return true.

3. If you want to preserve RPM information in ramdump, you also need to:

* Remove "boot_pbl_is_auth_enabled()==FALSE" from boot_images/core/boot/secboot3/hw/msm8974/sbl1/
sbl1_config.c : rpm_load_cancel()

4. TZ logging is disabled on a secure boot device. To enable it:

* Modify trustzone_images/core/securemsm/trustzone/qsee/oem/msm8974/src/tzbsp_oem_log.c :
tzbsp_oem_allow_logging() to return true.

5. Enable backup tz mem region (important for tz debug)

* Modify boot source code, boot_images/core/boot/secboot3/src/boot_dload_debug.c, let
boot_dload_is_tz_dump_allowed() return boot_dload_is_dload_mode_set() directly.

6. Make sure SDI is loaded regardless jtag disable fuses:

```
/* Conditionally cancel SDI loading in SBL1 */
static boot_boolean wdt_load_cancel(bl_shared_data_type *bl_shared_data)
{
...
do
{
/* Do not load SDI if we are in dload mode */
...

#if 0 // <---- comment out, make sure SDI always load if not in dload mode.
if(DEBUG_DISABLE_WDT)
{
break;
}

#endif

...
}
```