miniloader把u-boot载入到0x0800,0000开始的physical address,u-boot的exception vector table也在该处。

```
08000000 <__image_copy_start>:
 8000000:       ea000013        b       8000054 <reset>
 8000004:       e59ff014        ldr     pc, [pc, #20]   ; 8000020 <_undefined_instruction>
 8000008:       e59ff014        ldr     pc, [pc, #20]   ; 8000024 <_software_interrupt>
 800000c:       e59ff014        ldr     pc, [pc, #20]   ; 8000028 <_prefetch_abort>
 8000010:       e59ff014        ldr     pc, [pc, #20]   ; 800002c <_data_abort>
 8000014:       e59ff014        ldr     pc, [pc, #20]   ; 8000030 <_not_used>
 8000018:       e59ff014        ldr     pc, [pc, #20]   ; 8000034 <_irq>
 800001c:       e59ff014        ldr     pc, [pc, #20]   ; 8000038 <_fiq>
```

那么u-boot也需要把A53 core的exception vector table remap到0x08000000来！否则A53只要一产生exception或interrupt，A53 is out of control。

in u-boot/arch/arm/cpu/armv7/start.S

```
#if !(defined(CONFIG_OMAP44XX) && defined(CONFIG_SPL_BUILD))
        /* Set V=0 in CP15 SCTRL register - for VBAR to point to vector */
        mrc  p15, 0, r0, c1, c0, 0 @ Read CP15 SCTRL Register
        bic    r0, #CR_V               @ V = 0
        mcr  p15, 0, r0, c1, c0, 0 @ Write CP15 SCTRL Register

        /* Set vector address in CP15 VBAR register */
```

```
        ldr     r0, =_start
        mcr  p15, 0, r0, c12, c0, 0       @Set VBAR
#endif
```

这里的_start即指向0x0800,0000.

```
$ cat u-boot.map | grep " _start"
                0x0000000008000000                _start
```