Log Event

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Offset** | **Bits 31-24** | **Bits 23-16** | **Bits 15-8** | **Bits 7-0** |
| 0x0 | Log Event ID | Error Code (valid only if valid Error Source provisioned) | | |
| 0x4 | Parameter0 (Optional, available for some event) | | | |
| 0x8 | Parameter1 (Optional, available for some event) | | | |
| 0xC | Parameter2 (Optional, available for some event) | | | |

Note: The number of the parameter is event dependent.

Log Event ID Definitions (version 1)

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Descriptions** | **Parameters** | **Comments** |
| 0x01 | EVENT\_LOG\_VERSION | ErrCode: log version. | For 8QM B0, it is 0x01  If no such event, the log version will be 0 (the one for 8QXP B0) |
| 0x02 | EVENT\_BOOT\_PHASE\_DEV\_SETUP\_FAIL | No | Error found when DEV\_SETUP, including boot device selection, ROM internal boot device context setup, boot interface (say USDHC IP) and externa boot device (say, SD card) initialization. |
| 0x03 | EVENT\_BT\_PHASE\_INITIAL\_IMG\_PROCESS\_FAIL | No | Something wrong found by ROM in Initial Image (8KB) loading and checking. |
| 0x04 | EVENT\_BT\_PHASE\_IMAGE\_PROCESS\_FAIL | No | Something wrong found by ROM in SECO/SCU container (including their images) loading, checking, authentication, image verifying, or image calling (say DDR init image return failure). |
| 0x0F | EVENT\_ERROR\_HDLR\_ENTER | Pare0: Current boot stage  Para1: The boot stage will move to  Para2: Tick | In the handler, ROM will move boot stage then trigger a reset. |
| 0x10 | EVENT\_BOOT\_MODE\_BT\_FROM\_FUSE | No |  |
| 0x11 | EVENT\_BOOT\_MODE\_SEIRAL\_DOWNLOADER | No |  |
| 0x12 | EVENT\_BOOT\_MODE\_NORMAL\_BOOT | No |  |
| 0x13 | EVENT\_BOOT\_MODE\_TEST\_MODE | No |  |
| 0x1F | EVENT\_RAW\_BOOT\_MODE\_PIN\_RECORD | ErrCode: raw boot mode pin value |  |
| 0x20 | EVENT\_LIFE\_CYCLE\_FAB | No | We need table to list the mapping between LifeCycle to the legacy HAB status. [Jerry] |
| 0x21 | EVENT\_LIFE\_CYCLE\_FIELD\_RETURN | No |  |
| 0x22 | EVENT\_LIFE\_CYCLE\_OPEN | No |  |
| 0x23 | EVENT\_LIFE\_CYCLE\_CLOSED | No |  |
|  |  |  |  |
| 0x50 | EVENT\_BOOT\_STAGE\_PRIMARY | No |  |
| 0x51 | EVENT\_BOOT\_STAGE\_SECONDARY | No |  |
| 0x52 | EVENT\_BOOT\_STAGE\_RECOVERAY | No |  |
| 0x53 | EVENT\_BOOT\_STAGE\_SERIAL\_DOWNLOAD | No |  |
|  |  | No |  |
| 0x60 | EVENT\_BOOT\_DEVICE\_NAND | No |  |
| 0x61 | EVENT\_BOOT\_DEVICE\_USDHC | No |  |
| 0x67 | EVENT\_BOOT\_DEVICE\_FLEXSPI | No |  |
|  |  |  |  |
| 0x73 | EVENT\_BOOT\_DEVICE\_REC\_SD | No |  |
|  |  |  |  |
| 0x80 | EVENT\_BOOOT\_DEVICE\_INIT | Para0: Tick |  |
| 0x81 | EVENT\_BOOOT\_DEVICE\_INIT\_PASS | Para0: Tick |  |
| 0x8F | EVENT\_BOOOT\_DEVICE\_INIT\_FAIL | Para0: Tick |  |
| 0x84 | EVENT\_IMAGE\_SET\_SELECT\_SET0 | No |  |
| 0x85 | EVENT\_IMAGE\_SET\_SELECT\_SET1 | No |  |
| 0x86 | EVENT\_IMAGE\_SET1\_OFF\_VALID | No |  |
| 0x8D | EVENT\_NO\_VALID\_IMAGE\_CNTR\_HEADER | No | No valid header been found in both Image Sets. |
| 0x8E | EVENT\_DEV\_PRECFG\_FAIL | No | Device driver pre-configure function returns failure |
|  |  |  |  |
| 0x90 | EVENT\_DEV\_READ | Para0: offset on the device to read from. In bytes.  Para1: tick |  |
| 0x91 | EVENT\_DEV\_READ\_SUCCEED | Para0: Tick |  |
| 0x9F | EVENT\_DEV\_READ\_FAIL | Parea0: Tick |  |
| 0x94 | EVENT\_IMAGE\_XIP |  | Image run in place of boot device directly. |
| 0x9E | EVENT\_IMAGE\_TGT\_ADDRESS\_INVALID | Para0: Start address of image’s target space  Para1: Image’s length | Image’s target space isn’t valid |
|  |  |  |  |
| 0xA1 | EVENT\_SECO\_HEADER\_INVALID | No | SECO container header isn’t valid |
| 0xA2 | EVENT\_SECO\_HEADER\_VALID |  |  |
| 0xA3 | EVENT\_SECO\_FW\_AUTH\_PASS | Para0: Response code from SECO  Para1: Tick |  |
| 0xA4 | EVENT\_SECO\_FW\_AUTH\_FAIL | Para0: Response code from SECO  Para1: Tick | **Note\_0xA4:** If error code is “Message sending (to SECO) fail” or “Message receiving (from SECO) fail”, Para0 shall be ignored. |
| 0xA5 | EVENT\_SCU\_CNTR\_AUTH\_PASS | Para0: Response code from SECO  Para1: Tick |  |
| 0xA6 | EVENT\_SCU\_CNTR\_AUTH\_FAIL | Para0: Response code from SECO  Para1: Tick | **Note\_0xA4** |
| 0xA7 | EVENT\_IMAGE\_VERIFY\_PASS | Pare0: Image ID.  Para1: Response code from SECO  Para2: Tick |  |
| 0xA8 | EVENT\_IMAGE\_VERIFY\_FAIL | Pare0: Image ID  Para1: Response code from SECO  Para2: Tick | **Note\_0xA4** |
| 0xA9 | EVENT\_SCU\_CNTR\_RELEASE\_PASS | Para0: Response code from SECO |  |
| 0xAA | EVENT\_SCU\_CNTR\_RELEASE\_FAIL | Para0: Response code from SECO | **Note\_0xA4** |
| 0xAB | EVENT\_DDR\_INIT\_IMG\_FOUND | No |  |
| 0xAC | EVENT\_SCU\_CNTR\_INVALID | No |  |
| 0xAD | EVENT\_SCU\_CNTR\_INVALID | N0 |  |
|  |  |  |  |
| 0xB0 | EVENT\_CALL\_IN\_DDR\_INIT\_IMG | Para0: DDR INIT image entry  Para1: Tick |  |
| 0xB1 | EVENT\_DDR\_INIT\_IMG\_RETURN\_SUCCEED | Para0: Tick |  |
| 0xB2 | EVENT\_SCU\_CNTR\_AUTH\_PASS | Para0: Tick |  |
|  |  |  |  |
| 0xC0 | EVENT\_JUMP\_TO\_SCFW | Para0: stack  Para1: entry  Para2: Tick |  |
| 0xCF | EVENT\_SCFW\_BACK\_ROM | No |  |
|  |  |  |  |
| 0xD0 | EVENT\_BOOT\_DEV\_SEIRAL\_DOWNLOADER | No | Boot mode is serial download or boot stage is serial download stage. |
|  |  |  |  |
| 0xE0 | EVENT\_ROM\_PATCH\_APPLIED | No |  |
|  |  |  |  |
| 0xF0 | EVENT\_EXCEPTION\_OCCUR | Para0: Return Address |  |
|  |  |  |  |
| 0xFF | EVENT\_COMMON\_EVENT | ErrCode:  Event Number |  |