FR1150 – EFS Item Configuration

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Revision History

Revision	Date	Description
A	Dec 2012	Initial release

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QXDM Requirement

- QXDM ver 3.14.367 and above support these NVs.

- The UIM hardware-configurable parameters are documented in [Q2], which is also released by Qualcomm Technologies, Inc. (QTI).

- These runtime-configurable items are part of the UIM HW CONFIG EFS item (70210).

  - Risk – EFS corruption may cause issues but that impacts the other tech areas as well.

- These minimum sets of configurable items are carefully chosen to minimize the chances of mistakes by the customer. The software also has a default configuration (that matches the MTP/CDP configuration) in case the EFS item is not configured.

FR1150 – Default EFS Configuration for MSM8974

- UIM1 is enabled and UIM2 is disabled as default.
- UIM2 can be enabled at runtime.
- A brief description on these NV items is provided in [Q2].

Fields

EFS item: 70210 (UIM HW Config)

Input	Value	Name (Partial)	Size	Type
0	VER_0	version	8	Signed Enum
0	0	hw_config.UIM_BATT_ALARM_GPIO_NUM	16	UINT16
0	0	hw_config.UIM_BATT_ALARM_GPIO_FUNC_SELECTION	8	UINT8
0	2MA	hw_config.UIM_BATT_ALARM_GPIO_DRV_STRENGTH	8	Signed Enum
0	NO_PULL	hw_config.UIM_BATT_ALARM_PULL_SETTING	8	Signed Enum
0	FALSE	hw_config.UIM[0].DISABLE_UIM	8	Signed Enum
0	FALSE	hw_config.UIM[0].ENABLE_UIM_HOTSWAP	8	Signed Enum
1	ACTIVE_HIGH	hw_config.UIM[0].UIM_HOTSWAP_POLARITY	8	Signed Enum
89	89	hw_config.UIM[0].UIM_CONTROLLER_IRQ_NUM	16	UINT16
0	BADGER_MSS_UIM...	hw_config.UIM[0].UIM_UART	8	Signed Enum
87	87	hw_config.UIM[0].UIM_UART_IRQ_NUM	16	UINT16
0	PMIC_NPA_RESOU...	hw_config.UIM[0].UIM_VCC	8	Signed Enum
99	99	hw_config.UIM[0].UIM_RESET_GPIO_NUM	16	UINT16
1	1	hw_config.UIM[0].UIM_RESET_GPIO_FUNC_SELECTION	8	UINT8
0	2MA	hw_config.UIM[0].UIM_RESET_GPIO_DRV_STRENGTH	8	Signed Enum
0	NO_PULL	hw_config.UIM[0].UIM_RESET_PULL_SETTING	8	Signed Enum
97	97	hw_config.UIM[0].UIM_DATA_GPIO_NUM	16	UINT16
1	1	hw_config.UIM[0].UIM_DATA_GPIO_FUNC_SELECTION	8	UINT8
0	2MA	hw_config.UIM[0].UIM_DATA_GPIO_DRV_STRENGTH	8	Signed Enum
0	NO_PULL	hw_config.UIM[0].UIM_DATA_PULL_SETTING	8	Signed Enum

UIM1 is enabled

Hotswap disabled by default. Set to TRUE to enable it

FR1150 – Default EFS Configuration for MSM8974 for UIM2

Input	Value	Name (Partial)	Size	Type	
		EFS item: 70210 (UIM HW Config)			
0	NO_PULL	hw_config.UIM[0].UIM_DATA_PULL_SETTING	8	Signed Enum	
98	98	hw_config.UIM[0].UIM_CLOCK_GPIO_NUM	16	UINT16	
1	1	hw_config.UIM[0].UIM_CLOCK_GPIO_FUNC_SELECTION	8	UINT8	
0	2MA	hw_config.UIM[0].UIM_CLOCK_GPIO_DRV_STRENGTH	8	Signed Enum	
0	NO_PULL	hw_config.UIM[0].UIM_CLOCK_PULL_SETTING	8	Signed Enum	
100	100	hw_config.UIM[0].UIM_CARD_DETECT_GPIO_NUM	16	UINT16	
1	1	hw_config.UIM[0].UIM_CARD_DETECT_GPIO_FUNC_SEL...	8	UINT8	UIM2 is disabled
0	2MA	hw_config.UIM[0].UIM_CARD_DETECT_GPIO_DRV_STRE...	8	Signed Enum	
0	NO_PULL	hw_config.UIM[0].UIM_CARD_DETECT_PULL_SETTING	8	Signed Enum	
1	TRUE	hw_config.UIM[1].DISABLE_UIM	8	Signed Enum	
0	FALSE	hw_config.UIM[1].ENABLE_UIM_HOTSWAP	8	Signed Enum	
1	ACTIVE_HIGH	hw_config.UIM[1].UIM_HOTSWAP_POLARITY	8	Signed Enum	
90	90	hw_config.UIM[1].UIM_CONTROLLER_IRQ_NUM	16	UINT16	
1	BADGER_MSS_UIM...	hw_config.UIM[1].UIM_UART	8	Signed Enum	
88	88	hw_config.UIM[1].UIM_UART_IRQ_NUM	16	UINT16	
1	PMIC_NPA_RESOU...	hw_config.UIM[1].UIM_VCC	8	Signed Enum	
51	51	hw_config.UIM[1].UIM_RESET_GPIO_NUM	16	UINT16	
1	1	hw_config.UIM[1].UIM_RESET_GPIO_FUNC_SELECTION	8	UINT8	
0	2MA	hw_config.UIM[1].UIM_RESET_GPIO_DRV_STRENGTH	8	Signed Enum	
0	NO_PULL	hw_config.UIM[1].UIM_RESET_PULL_SETTING	8	Signed Enum	

FR1150 – Default EFS Configuration for MSM9x25

- UIM2 is enabled and UIM1 is disabled by default.

EFS item: 70210 (UIM HW Config)

Input	Value	Name (Partial)	Size	Type	
0	VER_0	version	8	Signed Enum	
0	0	hw_config.UIM_BATT_ALARM_GPIO_NUM	16	UINT16	
0	0	hw_config.UIM_BATT_ALARM_GPIO_FUNC_SELECTION	8	UINT8	UIM1 disabled
0	2MA	hw_config.UIM_BATT_ALARM_GPIO_DRV_STRENGTH	8	Signed Enum	
0	NO_PULL	hw_config.UIM_BATT_ALARM_PULL_SETTING	8	Signed Enum	
1	TRUE	hw_config.UIM[0].DISABLE_UIM	8	Signed Enum	
0	FALSE	hw_config.UIM[0].ENABLE_UIM_HOTSWAP	8	Signed Enum	
1	ACTIVE_HIGH	hw_config.UIM[0].UIM_HOTSWAP_POLARITY	8	Signed Enum	
89	89	hw_config.UIM[0].UIM_CONTROLLER_IRQ_NUM	16	UINT16	
0	BADGER_MSS_UIM...	hw_config.UIM[0].UIM_UART	8	Signed Enum	
87	87	hw_config.UIM[0].UIM_UART_IRQ_NUM	16	UINT16	
0	PMIC_NPA_RESOU...	hw_config.UIM[0].UIM_VCC	8	Signed Enum	
99	99	hw_config.UIM[0].UIM_RESET_GPIO_NUM	16	UINT16	
1	1	hw_config.UIM[0].UIM_RESET_GPIO_FUNC_SELECTION	8	UINT8	
0	2MA	hw_config.UIM[0].UIM_RESET_GPIO_DRV_STRENGTH	8	Signed Enum	
0	NO_PULL	hw_config.UIM[0].UIM_RESET_PULL_SETTING	8	Signed Enum	
97	97	hw_config.UIM[0].UIM_DATA_GPIO_NUM	16	UINT16	
1	1	hw_config.UIM[0].UIM_DATA_GPIO_FUNC_SELECTION	8	UINT8	
0	2MA	hw_config.UIM[0].UIM_DATA_GPIO_DRV_STRENGTH	8	Signed Enum	
0	NO_PULL	hw_config.UIM[0].UIM_DATA_PULL_SETTING	8	Signed Enum	

Note: UIM1 cannot be enabled during runtime due to hardware CR QCTDD00327990.

FR1150 – Default EFS Configuration for MSM9x25 for UIM2

Fields
EFS item: 70210 (UIM HW Config)

Input	Value	Name (Partial)	Size	Type
0	NO_PULL	hw_config.UIM[0].UIM_DATA_PULL_SETTING	8	Signed Enum
98	98	hw_config.UIM[0].UIM_CLOCK_GPIO_NUM	16	UINT16
1	1	hw_config.UIM[0].UIM_CLOCK_GPIO_FUNC_SELECTION	8	UINT8
0	2MA	hw_config.UIM[0].UIM_CLOCK_GPIO_DRV_STRENGTH	8	Signed Enum
0	NO_PULL	hw_config.UIM[0].UIM_CLOCK_PULL_SETTING	8	Signed Enum
100	100	hw_config.UIM[0].UIM_CARD_DETECT_GPIO_NUM	16	UINT16
1	1	hw_config.UIM[0].UIM_CARD_DETECT_GPIO_FUNC_SEL...	8	UINT8
0	2MA	hw_config.UIM[0].UIM_CARD_DETECT_GPIO_DRV_STRE...	8	Signed Enum
0	NO_PULL	hw_config.UIM[0].UIM_CARD_DETECT_PULL_SETTING	8	Signed Enum
0	FALSE	hw_config.UIM[1].DISABLE_UIM	8	Signed Enum
0	FALSE	hw_config.UIM[1].ENABLE_UIM_HOTSWAP	8	Signed Enum
1	ACTIVE_HIGH	hw_config.UIM[1].UIM_HOTSWAP_POLARITY	8	Signed Enum
90	90	hw_config.UIM[1].UIM_CONTROLLER_IRQ_NUM	16	UINT16
1	BADGER_MSS_UIM...	hw_config.UIM[1].UIM_UART	8	Signed Enum
88	88	hw_config.UIM[1].UIM_UART_IRQ_NUM	16	UINT16
1	PMIC_NPA_RESOU...	hw_config.UIM[1].UIM_VCC	8	Signed Enum
2	2	hw_config.UIM[1].UIM_RESET_GPIO_NUM	16	UINT16
1	1	hw_config.UIM[1].UIM_RESET_GPIO_FUNC_SELECTION	8	UINT8
0	2MA	hw_config.UIM[1].UIM_RESET_GPIO_DRV_STRENGTH	8	Signed Enum
0	NO_PULL	hw_config.UIM[1].UIM_RESET_PULL_SETTING	8	Signed Enum

UIM2 is enabled

UIM2 hotswap is disabled by default. Set to TRUE to enable it

References

Ref.	Document	
Qualcomm Technologies		
Q1	*Application Note: Software Glossary for Customers*	CL93-V3077-1
Q2	*UIM Driver Configurable Items*	80-NE596-2

Questions?

https://support.cdmatech.com