SBC OTP mapping

UNDER CONSTRUCTION

This description is tied to OTP management. If a '*lock bit*' or other mean is introduced, it will change this mapping. To be corrected as soon as OTP management is known.

Hereafter is shown the mapping with SBR relevant parameters. Hardware/Design parameters or values are not explicitly listed.

'**Offset**' is given in 8bits word and base address of OTP is not given here because it may be platform dependent. Note that OTP granularity is 32bits word. Again, it may be platform/technology dependent and, as a consequence, be subject to change/adaptation

Offset	Data	Comment
0x0000 ... 0x000c	UID	Specific to each part - size 16 Bytes
0x0010	TM_LOCK	TM lock, to disable test modes (SCAN; BIST, Analog…) after production
0x0014	PSD_LOCK	CPU debug lock, to disable PSD for user mode
0x0018	RMA_MODE	To enable RMA mode, PSD will be re-enabled
0x001c	RFU	
0x0020 ... 0x0024	Phase#1 pattern	Secure Boot Life Cycle, Phase 1
0x0028 ... 0x002c	Phase#2 pattern - 1st iteration	Secure Boot Life Cycle, Phase 2 - first iteration
0x0030 ... 0x0034	Phase#2 pattern - 2nd iteration	Secure Boot Life Cycle, Phase 2 - second iteration
0x0038	UART configuration for SUP - slot 1	This configuration parameter gathers parameters for UART IP if customer wants to differ from default values.
0x003c	UART configuration for SUP - slot 2	
0x0040	UART configuration for SUP - slot 3	

0x0044 ... 0x004c	RFU	
0x0050	SUP Stimulus slot 1	Here is the parameter to indicate GPIO bank, pin and level triggering SUP communication.
0x0054	SUP Stimulus slot 2	
0x0058	SUP Stimulus slot 3	
0x0060	CUK descriptor	Parameter indicating on what kind of algorithm is based CUK.
0x0064 ... 0x00c0	CUK	Customer Update Key - public part based on ECDSA secp384r1
0x00c4	CSK slot 1 - descriptor	Parameter indicating on what kind of algorithm is based CSK.
0x00c8 ... 0x0124	CSK - slot 1	Customer Signing Key - public part based on ECDSA secp384r1
0x0128 ... 0x0184	CSK signature - slot 1	CSK's signature computed with SSK.
0x0188	CSK slot 2 - descriptor	Parameter indicating on what kind of algorithm is based CSK.
0x018c ... 0x01e8	CSK - slot 2	Customer Signing Key - public part based on ECDSA secp384r1
0x01ec ... 0x0248	CSK signature - slot 2	CSK's signature computed with SSK.
0x024c	CSK slot 3 - descriptor	Parameter indicating on what kind of algorithm is based CSK.
0x0250 ... 0x02ac	CSK - slot 3	Customer Signing Key - public part based on ECDSA secp384r1
0x02b0 ... 0x030c	CSK signature - slot 3	CSK's signature computed with SSK.
0x0310	Boot Address - slot 1	Boot Address where to look for header SLB (later feature will be specific GPT descriptor).
0x0318	Boot Address - slot 2	
0x0320	Boot Address - slot 3	
0x0328	Application's Reference Version - slot 1	This version is the base reference from which SLB is granted to be launched.
0x032c	Application's Reference Version - slot 2	
0x0330	Application's Reference Version - slot 3	
0x0334		
...		
...		