

Skylake Platforms RVP/CRB BIOS Release Notes

Skylake – SPT LP/H

July 2015

CRB BIOS v90.2

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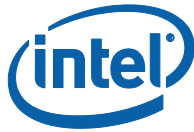


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Revision History

Revision Number	Description	Revision Date
41	SKL_SPT_CRB BIOS V41	July 2014
45.1	SKL_SPT_CRB BIOS V45_01	August 2014
50	SKL_SPT_CRB BIOS V50	September 2014
53.2	SKL_SPT_CRB BIOS V53.2	October 2014
53.2	SKL_SPT_CRB BIOS V53.3	October 2014
55.1	SKL_SPT_CRB BIOS V55.1	November 2014
58.1	SKL_SPT_CRB BIOS V58.1	November 2014
63.3	SKL_SPT_CRB BIOS V63.3	December 2014
66.1	SKL_SPT_CRB BIOS V66.1	January 2015
68.1	SKL_SPT_CRB BIOS V68.1	February 2015
71.3	SKL_SPT_CRB BIOS V71.3	February 2015
75.3	SKL_SPT_CRB BIOS V75.3	March 2015
75.3	SKL_SPT_CRB BIOS V75.4	March 2015
75.3	SKL_SPT_CRB BIOS V78.1	April 2015
81.1	SKL_SPT_CRB BIOS V81.1	April 2015
82	SKL_SPT_CRB BIOS V82	April 2015
84.2	SKL_SPT_CRB BIOS V84.2	May 2015
85.1	SKL_SPT_CRB BIOS V85.1	May 2015
89	SKL_SPT_CRB BIOS V89	June 2015
89.1	SKL_SPT_CRB BIOS V89.1	June 2015
90.1	SKL_SPT_CRB BIOS V890.1	July 2015
90.2	SKL_SPT_CRB BIOS V890.2	July 2015



1 SPI Images

1.1 SPI Images for Skylake (SKL+SPT LP) platforms

This release doesn't include full SPI Image.

1.2 SPI Images for Skylake (SKL+SPT LP) platforms

To create either 2x8M full SPI image of the CRB BIOS:

1. Download latest System BIOS
2. Search for the latest Intel® Management Engine Firmware kit.
3. Download and install the Intel® ME Firmware kit.
4. Follow instructions to build appropriate full image as described in the "Intel(R) ME FW Bring Up Guide" document (part of the Intel® ME Firmware kit)



2 Supported Hot Keys

CTRL+ALT+SHIFT+<KEY> causes a Hot-Key Event to the SBIOS. The specific <KEY> to complete the sequence is defined in the following table.

2.1 ACPI Hot-keys

F1	IGFX Display Switch using Toggle List 1.
F2	IGFX Display Switch using Toggle List 2.
F3	IGFX Display Switch using Toggle List 3.
F4	IGFX Display Switch using Toggle List 4.
F5	Virtual Power Switch Event (Toggle between Virtual AC and Virtual Battery Mode)
F8	IGFX Panel Fitting Hot-Key
F9	IGFX LCD Brightness Level – Decrease 10% if percentage > = 10%
F10	IGFX LCD Brightness Level – Increase 10% if percentage < = 90%
1/!	10% Virtual Battery
2/@	20% Virtual Battery
3/#	30% Virtual Battery
4/\$	40% Virtual Battery
5/%	50% Virtual Battery
6/^	60% Virtual Battery
7/&	70% Virtual Battery
8/*	80% Virtual Battery
9/(90% Virtual Battery
0/)	100% Virtual Battery
-/_	Virtual Battery % = Virtual Battery – 2%
= /+	Virtual Battery % = Virtual Battery + 2%

Notes:

1. The Virtual Battery hot-key values are a single key with dual purposes.
2. IGFX hot-keys are only supported when IGFX is present and is the primary display device. If that is not the case, the hot-keys will be disabled.
3. The virtual battery hot-keys are only valid when a virtual battery is present. If any real battery is present at all, these hot-keys are disabled. Additionally, the user will only be allowed to decrease battery percentages when in virtual battery mode and will only allow the user to increase battery percentages when in virtual AC Mode. Also, please note that some operating systems only display battery percentage differences that are $\geq \pm 4\%$.
4. All of the above hot-keys work in ONLY ACPI aware operating systems.



3 BIOS – SKL CRB v090.2

BIOS version	0.90.2
Video Option ROM (VBIOS)	V1022
GOP Driver	GOP 9.0.1027
Consumer MB ME Firmware SKU	11.0.0.0004
Corporate MB ME Firmware SKU	N/A
RST RAID OROM	14.0.0. 2241
MEBx	11.0.0.0004
PXE OROM	0.1.01
UEFI UNDI Driver	6.023
Silicon initialization code (SiC)	1.2.1
BIOS Guard(PFAT)	0.7.0(2.0. 20150527)
ACM (TXT)	SKL_BIOSAC_20150609_PRODUCTION_Rev0.85_RC5.BIN SKL_BIOSAC_20150609_DEBUG_Rev0.85_RC5.BIN
ACM (Boot Guard)	3340
Boot Guard ACM	ACM_v3340

3.1 Highlights

Update Silicon initialization code (SiC)

3.2 Resolved Client BIOS issues

n/a



4 BIOS – SKL CRB v090.1

BIOS version	0.90.1
Video Option ROM (VBIOS)	V1022
GOP Driver	GOP 9.0.1027
Consumer MB ME Firmware SKU	11.0.0.0004
Corporate MB ME Firmware SKU	N/A
RST RAID OROM	14.0.0. 2241
MEBx	11.0.0.0004
PXE OROM	0.1.01
UEFI UNDI Driver	6.023
Silicon initialization code (SiC)	1.2.0
BIOS Guard(PFAT)	0.7.0(2.0. 20150527)
ACM (TXT)	SKL_BIOSAC_20150609_PRODUCTION_Rev0.85_RC5.BIN SKL_BIOSAC_20150609_DEBUG_Rev0.85_RC5.BIN
ACM (Boot Guard)	3340
Boot Guard ACM	ACM_v3340

4.1 Highlights

- Update Silicon initialization code (SiC)
- Update MCU
- Update PXE OROM 0.1.01

4.2 Resolved Client BIOS issues

n/a



5 BIOS – SKL CRB v089.1

BIOS version	0.89.1
Video Option ROM (VBIOS)	V1022
GOP Driver	GOP 9.0.1027
Consumer MB ME Firmware SKU	11.0.0.0004
Corporate MB ME Firmware SKU	N/A
RST RAID OROM	14.0.0. 2241
MEBx	11.0.0.0004
PXE OROM	0.1.04
UEFI UNDI Driver	6.023
Silicon initialization code (SiC)	1.1.1
BIOS Guard(PFAT)	0.7.0(2.0. 20150527)
ACM (TXT)	SKL_BIOSAC_20150609_PRODUCTION_Rev0.85_RC5.BIN SKL_BIOSAC_20150609_DEBUG_Rev0.85_RC5.BIN
ACM (Boot Guard)	3340
Boot Guard ACM	ACM_v3340

5.1 Highlights

Update Silicon initialization code (SiC)
Update PXE OROM 0.1.01

5.2 Resolved Client BIOS issues

n/a



6 BIOS – SKL CRB v089

BIOS version	0.89	
Video Option ROM (VBIOS)	V1022	
GOP Driver	GOP 9.0.1027	
Consumer MB ME Firmware SKU	11.0.0.0004	
Corporate MB ME Firmware SKU	N/A	
RST RAID OROM	14.0.0. 2241	
MEBx	11.0.0.0004	
PXE OROM	0.1.04	
UEFI UNDI Driver	6.023	
Silicon initialization code (SiC)	1.1.0	
	BIOS Guard(PFAT)	0.7.0(2.0. 20150527)
	ACM (TXT)	SKL_BIOSAC_20150609_PRODUCTION_Rev0.85_RC5.BIN SKL_BIOSAC_20150609_DEBUG_Rev0.85_RC5.BIN
	ACM (Boot Guard)	3340
	Boot Guard ACM	ACM_v3340

6.1 Highlights

- Update Silicon initialization code (SiC)
- Update GOP and VBIOS
- Updated MEBX
- Update uCode
- Update ACM (TXT)
- Update RST RAID OROM
- Update PXE OROM
- Update BootGuard
- BIOS Guard(PFAT)

6.2 Resolved Client BIOS issues

n/a



7 BIOS – SKL CRB v085.1

BIOS version	0.85.1	
Video Option ROM (VBIOS) GOP Driver	V1020 GOP 9.0.1024	
Consumer MB ME Firmware SKU Corporate MB ME Firmware SKU	11.0.0.0004 N/A	
RST RAID OROM	14.0.0. 2198	
MEBx	11.0.0.0003	
PXE OROM	0.1.01	
UEFI UNDI Driver	6.023	
Silicon initialization code (SiC)	1.0.0	
	BIOS Guard(PFAT)	0.7.0(2.0.20150201)
	ACM (TXT)	SKL_BIOSAC_20150521 _PRODUCTION_Rev0.85_RC3.BIN SKL_BIOSAC_20150521 _DEBUG_Rev0.85_RC3.BIN
	ACM (Boot Guard)	3340
	Boot Guard ACM	ACM_v3305

7.1 Highlights

- Update Silicon initialization code (SiC)
- Update GOP and VBIOS
- Updated MEBX
- Update uCode
- Update ACM (TXT)
- Update BootGuard

7.2 Resolved Client BIOS issues

n/a



8

BIOS – SKL CRB v084.2

BIOS version	0.84.2		
Video Option ROM (VBIOS)	V1018		
GOP Driver	GOP 9.0.1022		
Consumer MB ME Firmware SKU	11.0.0.0003		
Corporate MB ME Firmware SKU	N/A		
RST RAID OROM	14.0.0. 2198		
MEBx	11.0.0.0003		
PXE OROM	0.1.01		
UEFI UNDI Driver	6.023		
Silicon initialization code (SiC)	0.9.0		
	BIOS Guard(PFAT)	0.7.0(2.0.20150201)	
	ACM (TXT)	Rev0.85_RC2	
	ACM (Boot Guard)	2.0.3120	
	Boot Guard ACM	ACM_v3305	



8.1 Highlights

- Update Silicon initialization code (SiC)
- Update GOP
- Update uCode
- Update ACM (TXT)
- Update BootGuard

8.2 Resolved Client BIOS issues

n/a



9 BIOS – SKL CRB v082

BIOS version	0.82.0		
Video Option ROM (VBIOS)	V1018		
GOP Driver	GOP 9.0.1022		
Consumer MB ME Firmware SKU	11.0.0.0003		
Corporate MB ME Firmware SKU	N/A		
RST RAID OROM	14.0.0. 2198		
MEBx	11.0.0.0003		
PXE OROM	0.1.01		
UEFI UNDI Driver	6.023		
Silicon initialization code (SiC)	0.8.1		
	BIOS Guard(PFAT)	0.7.0(2.0.20150201)	
	ACM (TXT)	Rev0.85_RC1	
	ACM (Boot Guard)	2.0.3120	
	Boot Guard ACM	ACM_v3220	

9.1 Highlights

Update Silicon initialization code (SiC)

9.2 Resolved Client BIOS issues

n/a



10 BIOS – SKL CRB v081.1

BIOS version	0.81.1		
Video Option ROM (VBIOS)	V1018		
GOP Driver	GOP 9.0.1022		
Consumer MB ME Firmware SKU	11.0.0.0003		
Corporate MB ME Firmware SKU	N/A		
RST RAID OROM	14.0.0. 2198		
MEBx	11.0.0.0003		
PXE OROM	0.1.01		
UEFI UNDI Driver	6.023		
Silicon initialization code (SiC)	0.8.0		
	BIOS Guard(PFAT)	0.7.0(2.0.20150201)	
	ACM (TXT)	Rev0.85_RC1	
	ACM (Boot Guard)	2.0.3120	
	Boot Guard ACM	ACM_v3220	

10.1 Highlights

- Update Video Option ROM (VBIOS)
- Update GOP
- Update uCode
- Update Si Code
- Update ACM (TXT)

10.2 Resolved Client BIOS issues

n/a



11 BIOS – SKL CRB v078.1

BIOS version	0.78.1		
Video Option ROM (VBIOS)	V1017		
GOP Driver	GOP 9.0.1021		
Consumer MB ME Firmware SKU	11.0.0.0003		
Corporate MB ME Firmware SKU	N/A		
RST RAID OROM	14.0.0. 2198		
MEBx	11.0.0.0003		
PXE OROM	0.1.01		
UEFI UNDI Driver	6.023		
Silicon initialization code (SiC)	0.7.2		
	BIOS Guard(PFAT)	0.7.0(2.0.20150201)	
	ACM (TXT)	Rev0.8_RC3	
	ACM (Boot Guard)	2.0.3120	
	Boot Guard ACM	ACM_v3220	

11.1 Highlights

Update Video Option ROM (VBIOS)

Update uCode

11.2 Resolved Client BIOS issues

n/a



11.3 Known Issues / Limitations

n/a



12 BIOS – SKL CRB v075.4

BIOS version	0.75.4		
Video Option ROM (VBIOS)	V1016		
GOP Driver	GOP 9.0.1021		
Consumer MB ME Firmware SKU	11.0.0.0003		
Corporate MB ME Firmware SKU	N/A		
RST RAID OROM	14.0.0. 2198		
MEBx	11.0.0.0003		
PXE OROM	0.1.01		
UEFI UNDI Driver	6.023		
Silicon initialization code (SiC)	0.7.2		
	BIOS Guard(PFAT)	0.7.0(2.0.20150201)	
	ACM (TXT)	Rev0.8_RC3	
	ACM (Boot Guard)	2.0.3120	
	Boot Guard ACM	ACM_v3220	

12.1 Highlights

Update Silicon initialization code (SiC)

12.2 Resolved Client BIOS issues

n/a

12.3 Known Issues / Limitations

n/a



13 BIOS – SKL CRB v075.3

BIOS version	0.75.3		
Video Option ROM (VBIOS)	V1016		
GOP Driver	GOP 9.0.1021		
Consumer MB ME Firmware SKU	11.0.0.0003		
Corporate MB ME Firmware SKU	N/A		
RST RAID OROM	14.0.0. 2198		
MEBx	11.0.0.0003		
PXE OROM	0.1.01		
UEFI UNDI Driver	6.023		
Silicon initialization code (SiC)	0.7.1		
	BIOS Guard(PFAT)	0.7.0(2.0.20150201)	
	ACM (TXT)	Rev0.8_RC3	
	ACM (Boot Guard)	2.0.3120	
	Boot Guard ACM	ACM_v3220	

13.1 Highlights

- Update GOP/vBIOS.
- Update MCU
- Update MEBx
- Update Boot Guard PFT/ACM
- Update Silicon initialization code (SiC)
- Legacy USB support has been enabled

13.2 Resolved Client BIOS issues

- Sporadically wireless NIC not detected by OS
- ULT Thermal Trip above 2.7 GHz
- Support wake from SD card events while host controller in D3



eDRAM enabling/disabling options in SKL

13.3 Known Issues / Limitations

n/a



14 BIOS – SKL CRB v071.3

BIOS version	0.71.3								
Video Option ROM (VBIOS) GOP Driver	V1015 GOP 9.0.1020								
Consumer MB ME Firmware SKU	11.0.0.1071								
Corporate MB ME Firmware SKU	N/A								
RST RAID OROM	14.0.0. 2198								
MEBx	11.0.0.0002								
PXE OROM	0.1.01								
UEFI UNDI Driver	6.023								
Silicon initialization code (SiC)	0.7.0								
	<table border="1"><tr><td>BIOS Guard(PFAT)</td><td>0.7(2.0.20141124)</td></tr><tr><td>ACM (TXT)</td><td>SKL_BIOSAC_20140923_DEBUG_Rev0.8_RC1</td></tr><tr><td>ACM (Boot Guard)</td><td>2.0.3120</td></tr><tr><td>Boot Guard ACM</td><td>ACM_v3220</td></tr></table>	BIOS Guard(PFAT)	0.7(2.0.20141124)	ACM (TXT)	SKL_BIOSAC_20140923_DEBUG_Rev0.8_RC1	ACM (Boot Guard)	2.0.3120	Boot Guard ACM	ACM_v3220
BIOS Guard(PFAT)	0.7(2.0.20141124)								
ACM (TXT)	SKL_BIOSAC_20140923_DEBUG_Rev0.8_RC1								
ACM (Boot Guard)	2.0.3120								
Boot Guard ACM	ACM_v3220								

14.1 Highlights

- Update GOP/vBIOS.
- Update MCU
- Update Boot Guard PFT/ACM
- Update Silicon initialization code (SiC)
- Legacy USB support has been enabled
- Postcodes will be routed to Intel® TraceHub in Release BIOS
- Skycam configuration setup options has been extended to RVP13 and PantherMountain
- Added MRC support for Phablet board



14.2 Resolved Client BIOS issues

Sx wake issue with RVP11 has been fixed
WiFi card (stone peak) detection issue has been fixed
Fixed PS2 KBD/Mouse not working issue in Windows 8.1 OS
Fixed CATERR issue during Sx cycling
Fixed critical issue that BSOD while booting to os when RTD3 is enabled.

14.3 Known Issues / Limitations

n/a



15 BIOS – SKL CRB v068.1

BIOS version	0.68.1	
Video Option ROM (VBIOS)	V1014	
GOP Driver	GOP 9.0.1019	
Consumer MB ME Firmware SKU	11.0.0.1071	
Corporate MB ME Firmware SKU	N/A	
RST RAID OROM	14.0.0. 2190	
MEBx	11.0.0.0002	
PXE OROM	0.1.01	
UEFI UNDI Driver	6.023	
Silicon initialization code (SiC)	0.6.5	
	BIOS Guard(PFAT)	0.7(2.0.20141124)
	ACM (TXT)	SKL_BIOSAC_20140923_DEBUG_Rev0.6_RC1
	ACM (Boot Guard)	2.0.3108
	Boot Guard ACM	ACM_v3220

15.1 Highlights

Update GOP/vBIOS.
Update MCU
Update Boot Guard ACM
Update Silicon initialization code (SiC)

15.2 Resolved Client BIOS issues

n/a.



15.3 Known Issues / Limitations

n/a



16 BIOS – SKL CRB v066.1

BIOS version	0.66.1	
Video Option ROM (VBIOS)	V1012	
GOP Driver	GOP 9.0.1018	
Consumer MB ME Firmware SKU	11.0.0.1071	
Corporate MB ME Firmware SKU	N/A	
RST RAID OROM	14.0.0.2165	
MEBx	11.0.0.0002	
PXE OROM	0.1.01	
UEFI UNDI Driver	6.023	
Silicon initialization code (SiC)	0.6.4	
	BIOS Guard(PFAT)	1.1.02.09.2014
	ACM (TXT)	SKL_BIOSAC_20140923_DEBUG_Rev0.6_RC1
	ACM (Boot Guard)	2.0.3108
	Boot Guard ACM	ACM_v3220

16.1 Highlights

Update GOP/vBIOS.
Update MCU
Boot Guard ACM
Silicon initialization code (SiC)

16.2 Resolved Client BIOS issues

n/a.



16.3 Known Issues / Limitations

n/a



17 BIOS – SKL CRB v063.4

BIOS version	0.63.4	
Video Option ROM (VBIOS)	V1009	
GOP Driver	GOP 9.0.1015	
Consumer MB ME Firmware SKU	11.0.0.1071	
Corporate MB ME Firmware SKU	N/A	
RST RAID OROM	14.0.0.2165	
MEBx	11.0.0.0002	
PXE OROM	0.1.01	
UEFI UNDI Driver	6.023	
Silicon initialization code (SiC)	0.6.3	
	BIOS Guard(PFAT)	1.1.02.09.2014
	ACM (TXT)	SKL_BIOSAC_20140923_DEBUG_Rev0.6_RC1
	ACM (Boot Guard)	2.0.3108
	Boot Guard ACM	ACM_v3108

17.1 Highlights

Update HSIOs.

17.2 Resolved Client BIOS issues

Fix hangs during RC6 enter.

17.3 Known Issues / Limitations

n/a



18 BIOS – SKL CRB v063.3

BIOS version	0.63.3	
Video Option ROM (VBIOS)	V1009	
GOP Driver	GOP 9.0.1015	
Consumer MB ME Firmware SKU	11.0.0.1071	
Corporate MB ME Firmware SKU	N/A	
RST RAID OROM	14.0.0.2165	
MEBx	11.0.0.0002	
PXE OROM	0.1.01	
UEFI UNDI Driver	6.023	
Silicon initialization code (SiC)	0.6.3	
	BIOS Guard(PFAT)	1.1.02.09.2014
	ACM (TXT)	SKL_BIOSAC_20140923_DEBUG_Rev0.6_RC1
	ACM (Boot Guard)	2.0.3108
	Boot Guard ACM	ACM_v3108

18.1 Highlights

- Update Silicon initialization code.
- Update vBIOS and GOP Driver
- Update Microcode (0xE and 0xC)
- Update Boot Guard ACM



18.2 Resolved Client BIOS issues

n/a.

18.3 Known Issues / Limitations

n/a



19 BIOS – SKL CRB v058.1

BIOS version	0.58.1	
Video Option ROM (VBIOS)	V1006	
GOP Driver	GOP 9.0.1014	
Consumer MB ME Firmware SKU	11.0.0.1071	
Corporate MB ME Firmware SKU	N/A	
RST RAID OROM	14.0.0.2165	
MEBx	11.0.0.0002	
PXE OROM	1.5.50	
UEFI UNDI Driver	6.023	
Silicon initialization code (SiC)	0.6.2	
	BIOS Guard(PFAT)	1.1.02.09.2014
	ACM (TXT)	SKL_BIOSAC_20140923_DEBUG_Rev0.6_RC1
	ACM (Boot Guard)	2.0.3108
	Boot Guard ACM	ACM_v3108

19.1 Highlights

Update Silicon initialization code.

Update vBIOS

Update Microcode

Update Boot Guard ACM



19.2 Resolved Client BIOS issues

n/a.

19.3 Known Issues / Limitations

n/a



20 BIOS – SKL CRB v053.3

BIOS version	0.53.3	
Video Option ROM (VBIOS)	V1006	
GOP Driver	GOP 9.0.1012	
Consumer MB ME Firmware SKU	11.0.0.1071	
Corporate MB ME Firmware SKU	N/A	
RST RAID OROM	14.0.0.2165	
MEBx	N/A	
PXE OROM	1.5.50	
UEFI UNDI Driver	6.023	
Silicon initialization code (SiC)	0.6.0	
	BIOS Guard(PFAT)	1.1.02.09.2014
	ACM (TXT)	SKL_BIOSAC_20140923_DEBUG_Rev0.6_RC1
	ACM (Boot Guard)	2.0.3108

20.1 Highlights

n/a

20.2 Resolved Client BIOS issues

Set BIOS critical trip point to 119C on 95W SKU. See Skylake Processor Platform Critical Trip Point Technical Advisory doc # 554076 for details.

20.3 Known Issues / Limitations

n/a



21 BIOS – SKL CRB v053.2

BIOS version	0.53.2	
Video Option ROM (VBIOS)	V1006	
GOP Driver	GOP 9.0.1012	
Consumer MB ME Firmware SKU	11.0.0.1071	
Corporate MB ME Firmware SKU	N/A	
RST RAID OROM	14.0.0.2165	
MEBx	N/A	
PXE OROM	1.5.50	
UEFI UNDI Driver	6.023	
Silicon initialization code (SiC)	0.6.0	
	BIOS Guard(PFAT)	1.1.02.09.2014
	ACM (TXT)	SKL_BIOSAC_20140923_DEBUG_Rev0.6_RC1
	ACM (Boot Guard)	2.0.3108

21.1 Highlights

- Update Si code
- Update MCU
- Update ACM (TXT)
- Update ACM (Boot Guard)
- Update RST RAID OROM

21.2 Resolved Client BIOS issues

n/a



21.3 Known Issues / Limitations

n/a



22 BIOS – SKL CRB v050

BIOS version	0.50.0	
Video Option ROM (VBIOS)	V1006	
GOP Driver	GOP 9.0.1012	
Consumer MB ME Firmware SKU	11.0.0.1071	
Corporate MB ME Firmware SKU	N/A	
RST RAID OROM	14.0.0.2150	
MEBx	N/A	
PXE OROM	1.5.50	
UEFI UNDI Driver	6.023	
Silicon initialization code (SiC)	0.5.2	
	BIOS Guard(PFAT)	1.1.02.09.2014
	ACM (TXT)	SKL_BIOSAC_20140821_DEBUG_Rev0.5_RC2
	ACM (Boot Guard)	V2934

22.1 Highlights

- Update Si code
- Update Video Option ROM (VBIOS)
- Update GOP
- Update MCU
- Update ACM (TXT)

22.2 Resolved Client BIOS issues

n/a



22.3 Known Issues / Limitations

n/a



23 BIOS – SKL CRB v045.1

BIOS version	0.45.1		
Video Option ROM (VBIOS)	V1002		
GOP Driver	GOP 9.0.1009		
Consumer MB ME Firmware SKU	11.0.0.1071		
Corporate MB ME Firmware SKU	N/A		
RST RAID OROM	14.0.0.2150		
MEBx	N/A		
PXE OROM	1.5.50		
UEFI UNDI Driver	6.023		
Silicon initialization code (SiC)	0.5.1		
	BIOS Guard(PFAT)	1.1.02.09.2014	
	ACM (TXT)	02.13.2014	
	ACM (Boot Guard)	V2934	

23.1 Highlights

- Update Si code
- Update Video Option ROM (VBIOS)
- Update GOP
- Update MCU
- Update RST

23.2 Resolved Client BIOS issues

n/a



24 BIOS – SKL CRB v041

BIOS version	0.41		
Video Option ROM (VBIOS)			
GOP Driver	GOP 9.0.1008		
Consumer MB ME Firmware SKU	11.0.0.1069		
Corporate MB ME Firmware SKU	N/A		
RST RAID OROM	14.0.0.2112		
MEBx	N/A		
PXE OROM	1.5.50		
UEFI UNDI Driver	6.023		
Silicon initialization code	0.5.0		
	BIOS Guard(PFAT)	1.1.02.09.2014	
	ACM (TXT)	02.13.2014	
	ACM (Boot Guard)	V2934	

24.1 Highlights

- First external BIOS binary release

24.2 Resolved Client BIOS issues

n/a

24.3 Known Issues / Limitations

n/a