

March 27 2020

Federal Communications Commission
Authorization and Evaluation Division
7435 Oakland Mills Road
Columbia, MD 21046

FCC Class II Permissive Change for FCC ID: ZNFHBS835

This is to request a Class II permissive change for FCC ID: ZNFHBS835 , originally granted on Jun 20, 2018 The device is identical to the previously certified LG STEREO Headset except for the modification following:

	ITEM	Before	After
1	OVP IC - R48, R49 Valu is changed. (OVP Voltage setting)	- U7 Kinetic KTS1670 - R48 : 240 K Ω (1%) - R49 : 62 K Ω (1%)	- U7 Richtek RT9718LGQW - R48 : 130 K Ω (1%) - R49 : 27 K Ω (1%)
2	- PCB Outline and position are changed.	N/A	- Secure solder area for wire arrangement - Move the position of components.
3	TVS Diode - C43 part is changed - D6 Value is changed	- C43 : 1005 1uF Cap - D6 : LESD8D5.0CAT5G (TVS Diode)	- C43 : Pclamp0511ZV (1006,surge) - D6 : LESD8LS5.0CT5G

For the detail of change in schematics and PCB layout, please refer to appendix.

* Conclusion: The device is still in compliance with the part 15 rule, then a Class II application is required.

Sincerely Yours,

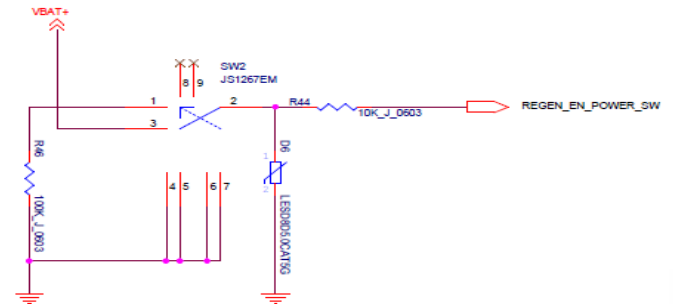


Kyung-Su Han
Director, NA Regulatory & Environmental Affairs
LG Electronics USA, Inc.

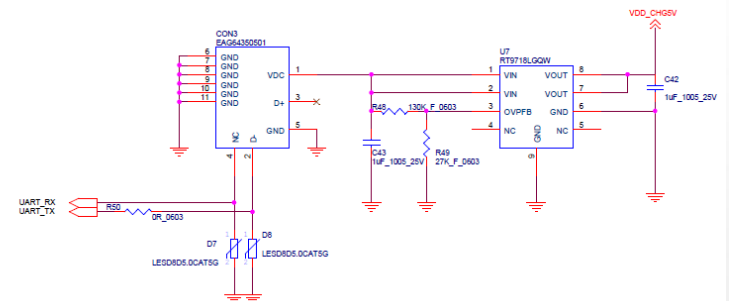
1. Schematics

After

POWER SLIDE SWITCH



MICRO USB

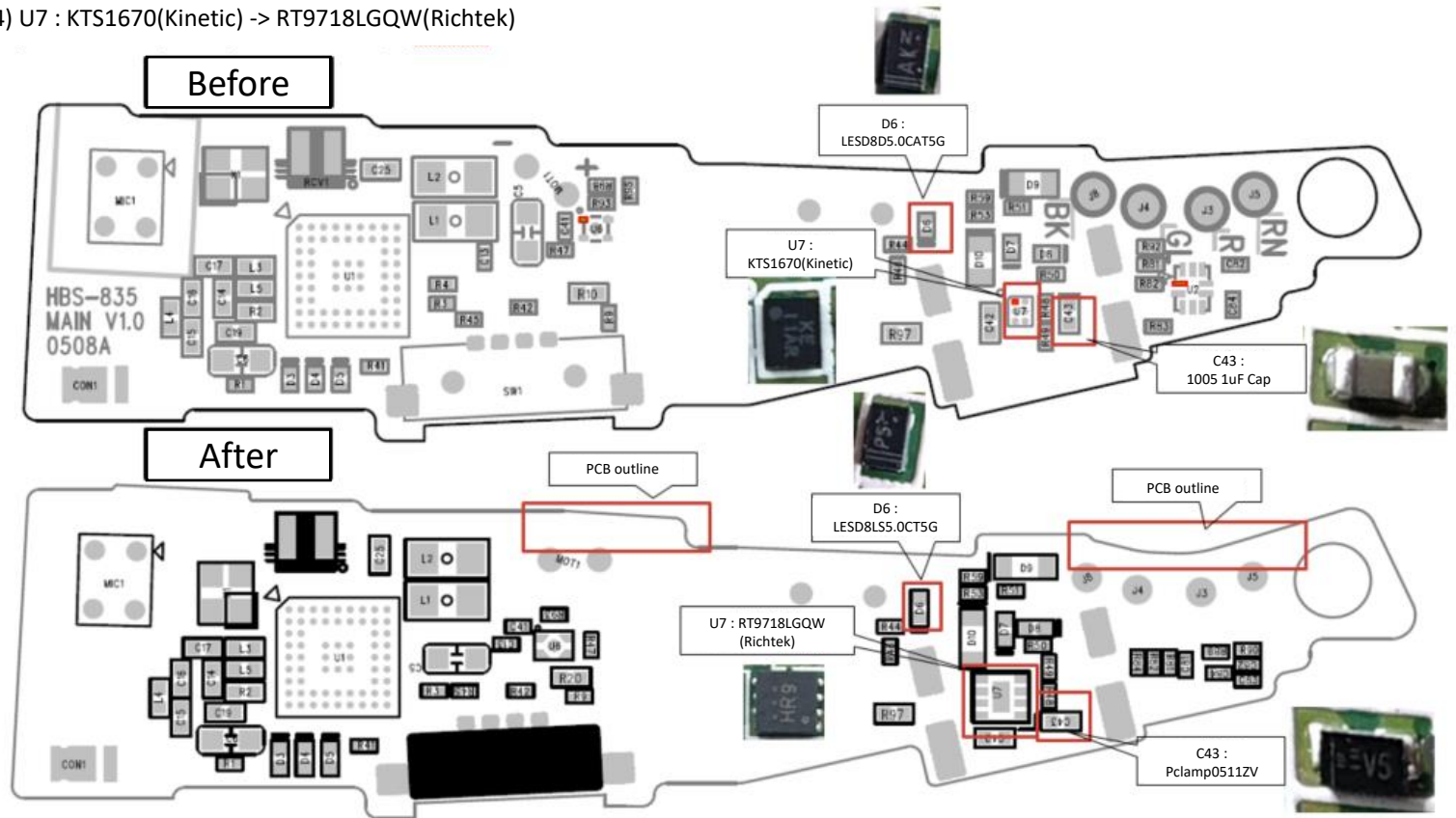


1. Schematics and PCB Layout

2. PCB Layout

Detail of Change

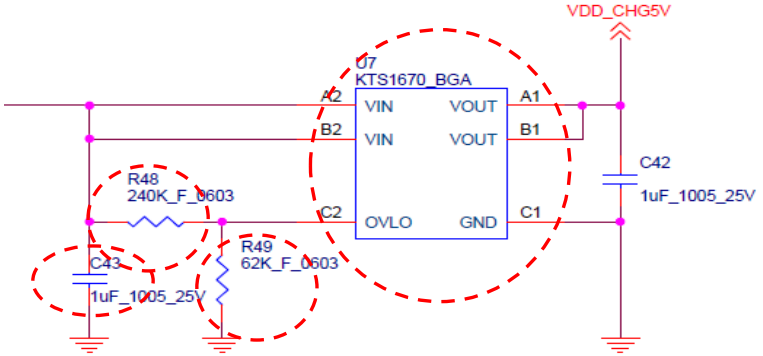
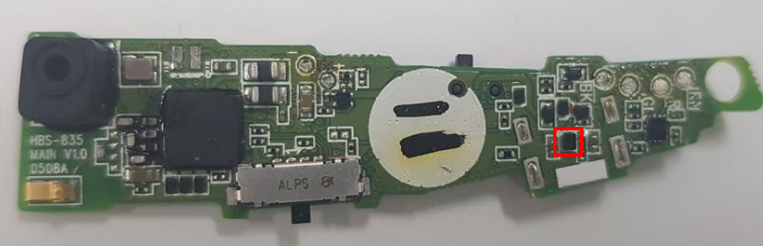
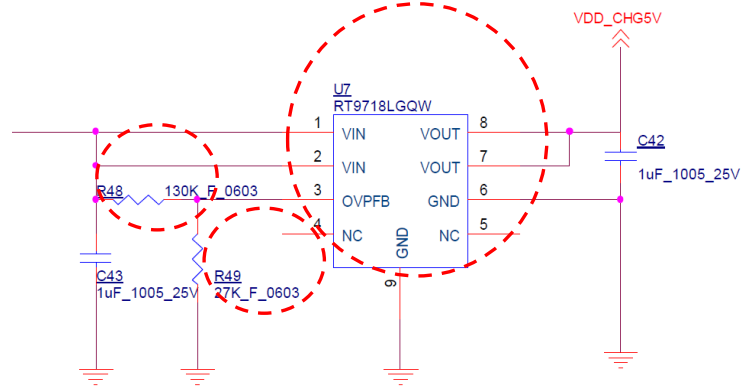
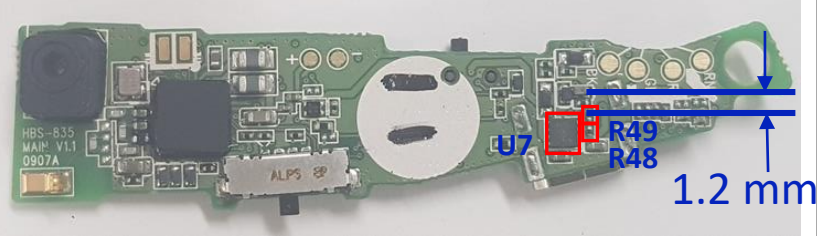
- 1) PCB Outline : Improvement of OVP IC SMT and Secure area for wire
- 2) D6 : LESD8D 5.0CAT5G -> LESD 8LS5.0CT5G
- 3) C43 : 1005 1uF Cap -> Pclamp0511ZV
- 4) U7 : KTS1670(Kinetic) -> RT9718LGQW(Richtek)



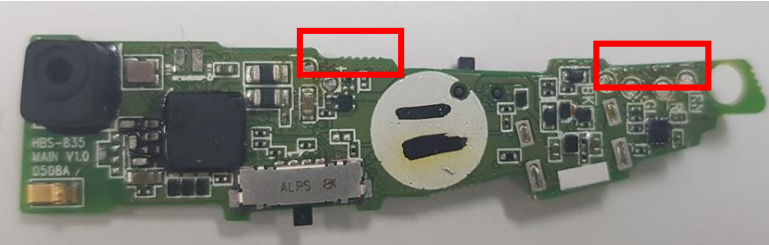
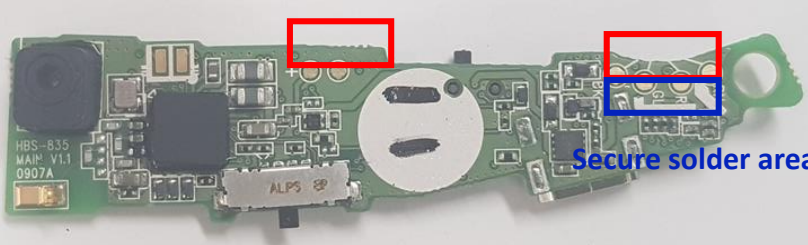
2. 4M Change List

	ITEM	Before	After
1	OVP IC - R48, R49 Value is changed. (OVP Voltage setting)	- U7 Kinetic KTS1670 - R48 : 240 K Ω (1%) - R49 : 62 K Ω (1%)	- U7 Richtek RT9718LGQW - R48 : 130 K Ω (1%) - R49 : 27 K Ω (1%)
2	- PCB Outline and position are changed.	N/A	- Secure solder area for wire arrangement - Move the position of components.
3	TVS Diode - C43 part is changed - D6 Value is changed	- C43 : 1005 1uF Cap - D6 : LESD8D5.0CAT5G (TVS Diode)	- C43 : Pclamp0511ZV (1006,surge) - D6 : LESD8LS5.0CT5G

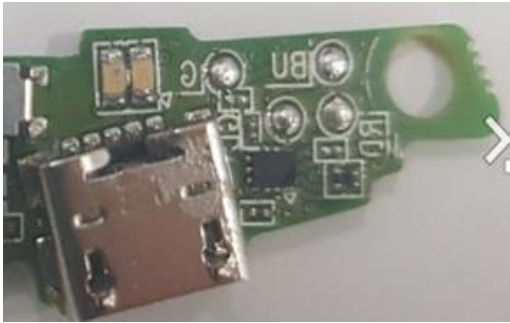
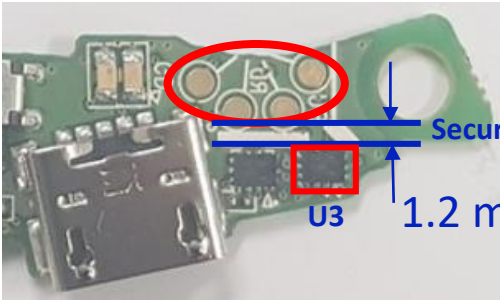
HW Change note

Item	Main PCB	
Description	HBS-835 MAIN V1.0 0508A	HBS-835 MAIN V1.1 0907A
	 	  ◆ OVP IC SMT improvement ◆ - U7 : OVP 6Pin BGA CSP Type -> 8Pin QFN Type (KTS1670 -> RT9718LGQW) - U3 : Move from Top to Bottom side - R48 : Value change 240KΩ(1%) -> 130 KΩ(1%) - R49 : Value change 62 KΩ(1%) -> 27 KΩ(1%)

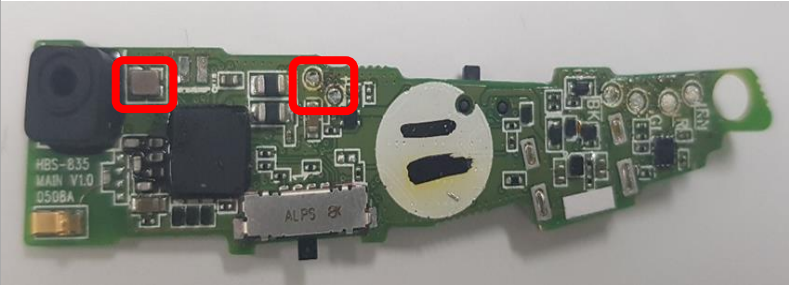
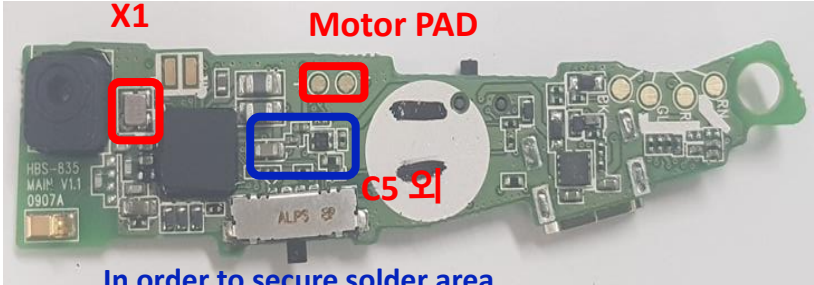
HW Change note

Item	Main PCB	
Description	HBS-835 MAIN V1.0 0508A	HBS-835 MAIN V1.1 0907A
	 The image shows the HBS-835 MAIN V1.0 0508A PCB. It is a green printed circuit board with various electronic components. Two red rectangular boxes highlight specific areas on the top edge of the board, likely indicating points of interest or changes.	 The image shows the HBS-835 MAIN V1.1 0907A PCB. It is a green printed circuit board with various electronic components. Two red rectangular boxes highlight specific areas on the top edge of the board. A blue rectangular box highlights a solder area on the right side of the board, with the text "Secure solder area" written in blue next to it. ◆ secure solder area for manual soldering - Prevent noise of mechanics in assembled status - Secure space for wire arrangement

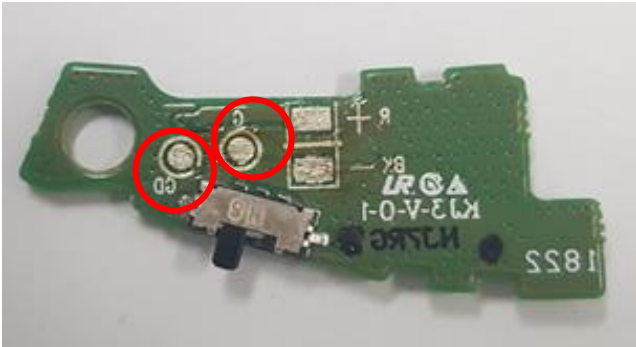
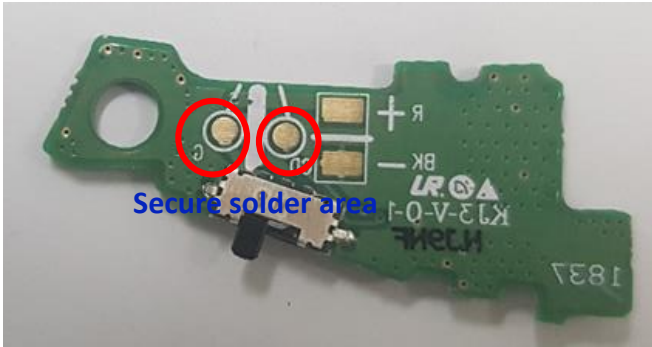
HW Change note

Item	Main PCB	
Description	HBS-835 MAIN V1.0 0508A	HBS-835 MAIN V1.1 0907A
		 ◆ Secure space for wire arrangement - U3 : move from Top to BTM side - J8,J4,J3,J5 : secure clearance over 1.2mm

HW Change note

Item	Main PCB	
Description	HBS-835 MAIN V1.0 0508A	HBS-835 MAIN V1.1 0907A
	 The image shows the HBS-835 MAIN V1.0 0508A PCB. Two components are highlighted with red boxes: a small square component on the left and a circular component in the center. The PCB is green with various electronic components and a large white circular area in the center.	 The image shows the HBS-835 MAIN V1.1 0907A PCB. Three components are highlighted: a small square component on the left (labeled X1), a circular component in the center (labeled Motor PAD), and a small rectangular component on the right (labeled C5). The PCB is green with various electronic components and a large white circular area in the center. In order to secure solder area, Position of component is changed ◆ secure solder area for manual soldering - X1 : Move the position - C5: move the position - Move the Motor PAD

HW Change note

Item	SUB PCB	
Description	HBS-835 SUB V1.0 0508A	HBS-835 SUB V1.1 0907A
		 ◆ secure solder area for manual soldering - Move the Solder PAD

HW Change note

Item	Main PCB	
Description	HBS-835 MAIN V1.0 0508A	HBS-835 MAIN V1.1 0907A