

Harman International Industries, Inc.

June 24, 2022

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

Attn: OET Dept.

Ref: FCC Class II Permissive change for FCC ID: APIJBLXTREME3N

Applicant: Harman International Industries, Inc.

Dear Examiner,

This is to request a Class II Permissive change for FCC ID: APIJBLXTREME3N originally granted on 08/20/2020 (date).

The change under this application as following:

1	AMP amplifier gain changed from 20DB to 26DB	
	1)	R11 changed from 51K to 47K
		R13 changed from 51K to 75K
	2)	R108 changed from NC to 100K
R141 changed from 5.6K to 20K		
2	DAC circuit modification	
	1)	C181, C179 changed from 2.8K to 1.1K
	2)	C84, C83 changed from 2.8K to NC empty stickers
	3)	C70, C71 changed from 3K to 0R
	4)	C77, C80, C182, C236 package changed from 0603 to 0402
	5)	U4 is changed to empty paste, and the surrounding devices are changed to empty paste
R46, R48, R49, R50, R51, R52, R43, R42, R41, R34, R37		
C63, C64, C74, C76, C72, C73, C75, C65, C68, C69		
3	FB14, FB17	
	DSP circuit OUT1:WF_L OU2:WF_R	
1)	Increase R372=0R R395=0R	
4	Modification of BT part to increase software version compatibility	
	1)	Increase R418=10K R404 reserved grounding resistance NC

5	0R resistance item delete	
	1)	BT page: delete R197, R254, connect directly on PCB
	2)	PD page: R273, R275, R278, R412, R342, R336, R417
		R327, R328, R334, R422 deleted, directly connected on the PCB
	3)	CHARGE page: delete R3, R12, R79, R80, connect directly on the PCB
	4)	DSP page: R84 is changed from 0R to delete, and it is directly connected on the PCB
R250, R100, R267 are changed from 0R to delete, and they are directly connected on the PCB		
5)	AMP page: R229, R201, R222, R221, R180, R202, R121, R119, R24 Change from 0R to delete, connect directly on the PCB	
6	Other special deletion	
	1)	Delete some useless USB devices
		C148, C302 changed from 22PF to NC (not available for reduced price version)
		FB15, FB13 changed from 300R/100M to NC
	2)	AMP mute circuit components deleted
		R28, R30, Q1, R27, R15 delete
R183 delete		
7	1)	USB chip change
		U5 component original TPS2546RTER changed to CW3048BAAQ

Four proposals have been submitted this time, the contents of this change are shown in the following table.

Scenario 1	CR4-SINO GP CELL	a. SDI Battery cell to GP battery cell (TI&SINO)
Scenario 2	CR4-TI GP CELL	
Scenario 3	CR2+CR3+SINO GP CELL	1) SDI Battery cell to GP battery cell (TI&SINO) 2) In total 8 IC's replacements
Scenario 4	CR2+CR3+TI GP CELL	

The details of IC changed in Scenario 3 and Scenario 4 are as follows:

IC	Manufacturer	Model
OP amp	TI	TS2278A
DC-DC boost chip	TI	ETA1038
DC-DC boost chip	TI	JW5060T
DC-DC boost chip	Silergy	JW5060T
USB Power Delivery Protocol chip	TI	SC1833
Battery charge management chip	TI	SC1896
BT CHIP	Shenzhen Jingxun Technology Co., Ltd.	SPIL CHIP (Chip package changes)
Logic IC	Silego	LS4V44057V

There are no RF parameter change to the operating frequency band, rated radiated and conducted output power of the device.

I attest that the certified device will not be capable of ad-hoc mode operation outside of the grant conditions.

Sincerely,

Signature:

Terry Shi

Name: Terry Shi

Title: Prin. Engineer, Regulatory Compliance, Quality

Company: Harman International Industries, Inc.