

Date: 05/13/2025
FCC ID: 2AHPN-BE2882

To the attention of:
Federal Communications Commission
Authorization and Evaluation Divisions

Declaration letter of device comparison

R1 INT ER 3B HW4 AND R1 INT RW 3B HW4

We, HARMAN, would like to apply for a Family certification for the following device:

Product Type: Automotive Infotainment Unit with Bluetooth/WLAN

Variants: R1 INT ER 3B HW4 / R1 INT RW 3B HW4

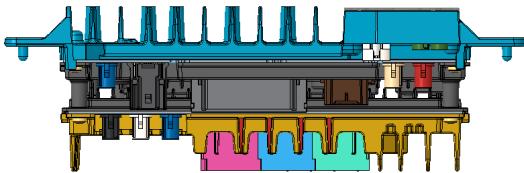
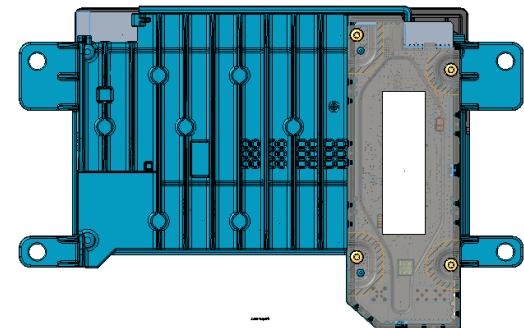
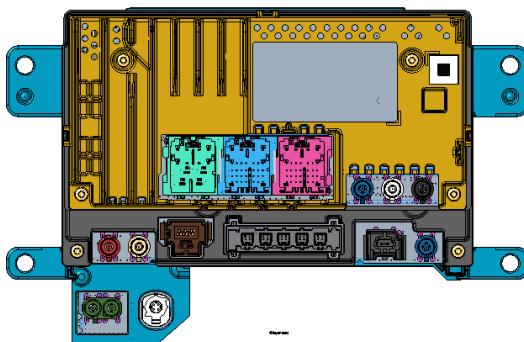
Manufacturer: HARMAN

Applicant's complete, legal business name: Harman International Industries, Incorporated

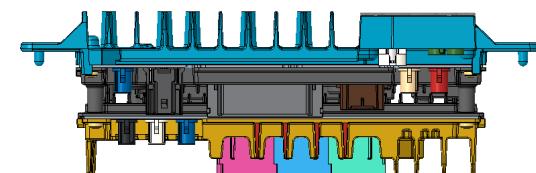
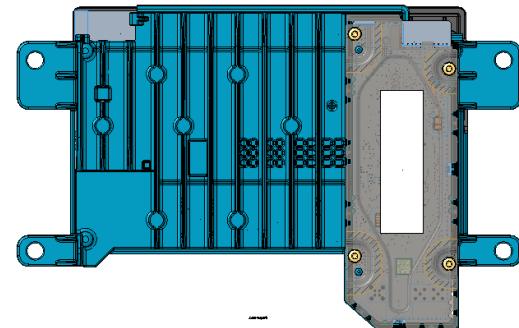
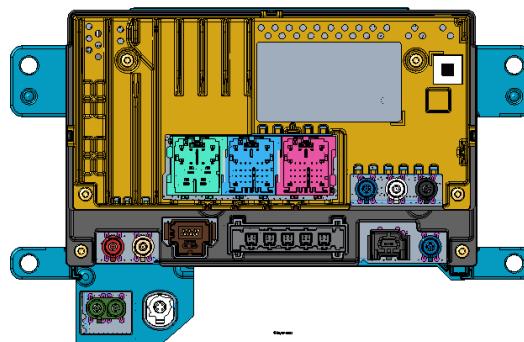
We declare the following device information and comparison between variants:

R1 INT ER 3B HW4	R1 INT RW 3B HW4
<ul style="list-style-type: none">Bluetooth/WLAN transmitter Model AW690HNI is manufactured by NXP Semiconductor.Two integrated antennas (BT/Wi-Fi 2.4G and Wi-Fi 5G)The intended operational frequency band for the integrated Bluetooth transmitter is 2402 – 2483.5 MHz with 79 frequency hopping channels with the max antenna gain of -1.24 dBi. Bluetooth TX_Power class 1.5. BTLE interface which is included in the block diagram will be disabled by Software after system wakeup. The Max antenna gain @ 5GHz is as follows:<ul style="list-style-type: none">Integral / 2.67 dBi for Subband U-NII-1Integral / 1.52 dBi for Subband U-NII-3 The second PCBA antenna manufactured by Harman that is used for 2.4GHz Wi-Fi WLAN with the max antenna gain of - 0.12 dBi. This is permanently affixed to the interior of the device and is non-removable and cannot be modified by normal means.	<ul style="list-style-type: none">Bluetooth/WLAN transmitter Model AW690HNI is manufactured by NXP Semiconductor.Two integrated antennas (BT/Wi-Fi 2.4G and Wi-Fi 5G)The intended operational frequency band for the integrated Bluetooth transmitter is 2402 – 2483.5 MHz with 79 frequency hopping channels with the max antenna gain of -1.24 dBi. Bluetooth TX_Power class 1.5. BTLE interface which is included in the block diagram will be disabled by Software after system wakeup. The Max antenna gain @ 5GHz is as follows:<ul style="list-style-type: none">Integral / 2.67 dBi for Subband U-NII-1Integral / 1.52 dBi for Subband U-NII-3 The second PCBA antenna manufactured by Harman that is used for 2.4GHz Wi-Fi WLAN with the max antenna gain of - 0.12 dBi. This is permanently affixed to the interior of the device and is non-removable and cannot be modified by normal means.

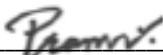
- **Transmission modes:**
 - 2.4 GHz, 11b/g/n/ac (20MHz)
 - 5 GHZ: 11a/n/ac (20, 40, 80 MHz)
 - All data rates of these standards are supported. (6-54 Mbit/s; MCS0-9)
- Dimensions: 23 cm X 16 cm X 9 cm ≈ 0.5Kg
- 3 of large connectors/Active Noise Cancellation
- The ER variant has an additional EU DAB tuner and FM antenna. **This is the highest populated variant.**



- **Transmission modes:**
 - 2.4 GHz, 11b/g/n/ac (20MHz)
 - 5 GHZ: 11a/n/ac (20, 40, 80 MHz)
 - All data rates of these standards are supported. (6-54 Mbit/s; MCS0-9)
- Dimensions: 23 cm X 16 cm X 9 cm ≈ 0.5Kg
- 3 of large connectors/Active Noise Cancellation
- No DAB Technology
- No FM antenna



Best regards



Pranav Patel
 Sr. Engineer, Certification

HARMAN
 Incorporated
 30001 Cabot Drive
 Novi, MI 48377 USA