



September 11, 2025

FCC ID: PENAP10

To whom it may concern,

We, UL Japan, Inc, hereby declare that UWB Module, model: AP10 (FCC ID: PENAP10) of AISIN CORPORATION is exempt from RF exposure SAR evaluation as its output power meets the following threshold stated in the Code of Federal Regulation title 47 section 1.1307(b)(3)(i)(C).

We also declare that the model's SAR value for the NFC device has been evaluated and found to meet the SAR limits stated in Title 47, Section 1.1310(c) of the Code of Federal Regulations.

UWB part:

Reference of average Power [EIRP]

Power spectral density [EIRP]: $-41.3 \text{ dBm/MHz} = 0.00007413 \text{ mW/MHz}$ *Specification value

99 % occupied Bandwidth: 614.473 MHz

Average power [EIRP]: $0.00007413 \text{ mW/MHz} \times 614.47 \text{ MHz} = 0.045552 \text{ mW}$ (-13.41 dBm)

Reference of average Power [ERP]

ERP [dBm] = EIRP [dBm] - 2.14 [dBi] *isotropic antenna gain

Average power [ERP]: $-13.41 \text{ dBm} - 2.14 \text{ dBi} = -15.56 \text{ dBm}$ (0.02783 mW)

Reference of average Power [Conducted]

Conducted power [dBm] = EIRP [dBm] - This product's antenna gain [dBi]

Average power [Conducted]: $-13.41 \text{ dBm} - 4.04 \text{ dBi} = -17.46 \text{ dBm}$ (0.01797 mW)

Threshold UWB ERP

* Evaluation Threshold ERP by Single RF Sources Subject to Routine Environmental

Threshold ERP by calculation formula on stated in the Code of Federal Regulation title 47 section 1.1307(b)(3)(i)(C).

TABLE 1 TO § 1.1307(b)(3)(i)(C)—SINGLE RF SOURCES SUBJECT TO ROUTINE ENVIRONMENTAL EVALUATION

RF Source frequency (MHz)	Threshold ERP (watts)
0.3-1.34	$1,920 R^2$.
1.34-30	$3,450 R^2/f^2$.
30-300	$3.83 R^2$.
300-1,500	$0.0128 R^2 f$.
1,500-100,000	$19.2R^2$.

The separation distance is specified between the UWB Antenna and a human body is 8 mm by the applicant. Therefore, R is 8 mm. *R is also a distance greater than $\lambda/2\pi$.

Threshold ERP(Watt): $19.2R^2 = 19.2 * 0.008^2 = 0.001229 \text{ W}$ (1.229 mW)
UWB ERP is 0.03 mW.

NFC part:

This device's SAR Value: 0.05 W/kg (Limit: 1.6 W/kg)

*Refer to RF EXPOSURE TEST REPORT No.15951622S-R1.

Evaluation for multiple RF sources:



Evaluation for multiple RF sources given by the Code of Federal Regulation title 47 section 1.1307(b)(3)(ii)(B):

Calculation formula given by the Code of Federal Regulation title 47 section 1.1307(b)(3)(ii)(B): for multiple mobile or portable RF sources

$$\sum_{i=1}^a \frac{P_i}{P_{th,i}} + \sum_{j=1}^b \frac{ERP_j}{ERP_{th,j}} + \sum_{k=1}^c \frac{Evaluated_k}{Exposure\ Limit_k} \leq 1$$

(UWB ERP: 0.03 mW / ERP th: 1.229 mW) + (NFC SAR Value: 0.05 W/kg / SAR limit: 1.6 W/kg) = 0.056

Thank you for your attention to this matter.

A handwritten signature in black ink that reads "T. Imamura".

Toyokazu Imamura
Engineer

