

Antenna Information

UGPZAA

					DSGD.			
					CHKD.	TITLE UGPZAA	ANT INFORMATION	
					APPD.			
					ALPSALPINE CO.,LTD.			
SYMB.	DATA OR NO.	APPD.	CHKD.	DSGD.				

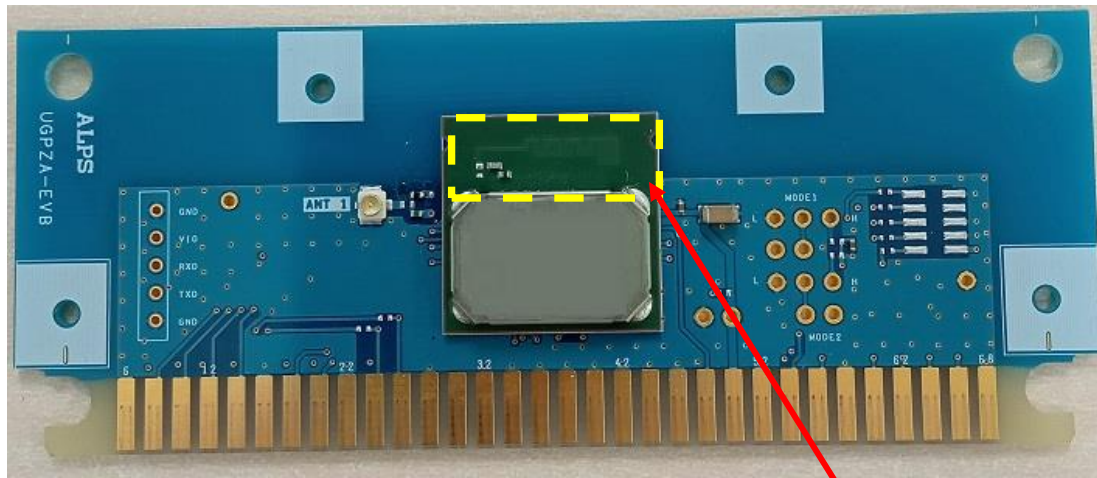
Contents

- 1. Antenna Information of Internal Antenna
- 2. Test Information
- 3. Test Method
- 4. Test Setups
- 5. Photographs of the DUT

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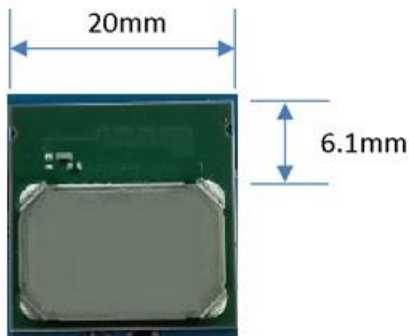
1. Antenna Information of Internal Antenna

Antenna	Manufacture	Antenna Type	VSWR	Peak Gain
Printed Antenna	ALPSALPINE	$\lambda/4$ Meander Line Antenna	2402-2480MHz 3.0 max	2.1 dBi



Printed Antenna

[Module on evaluation board]



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Antenna Information

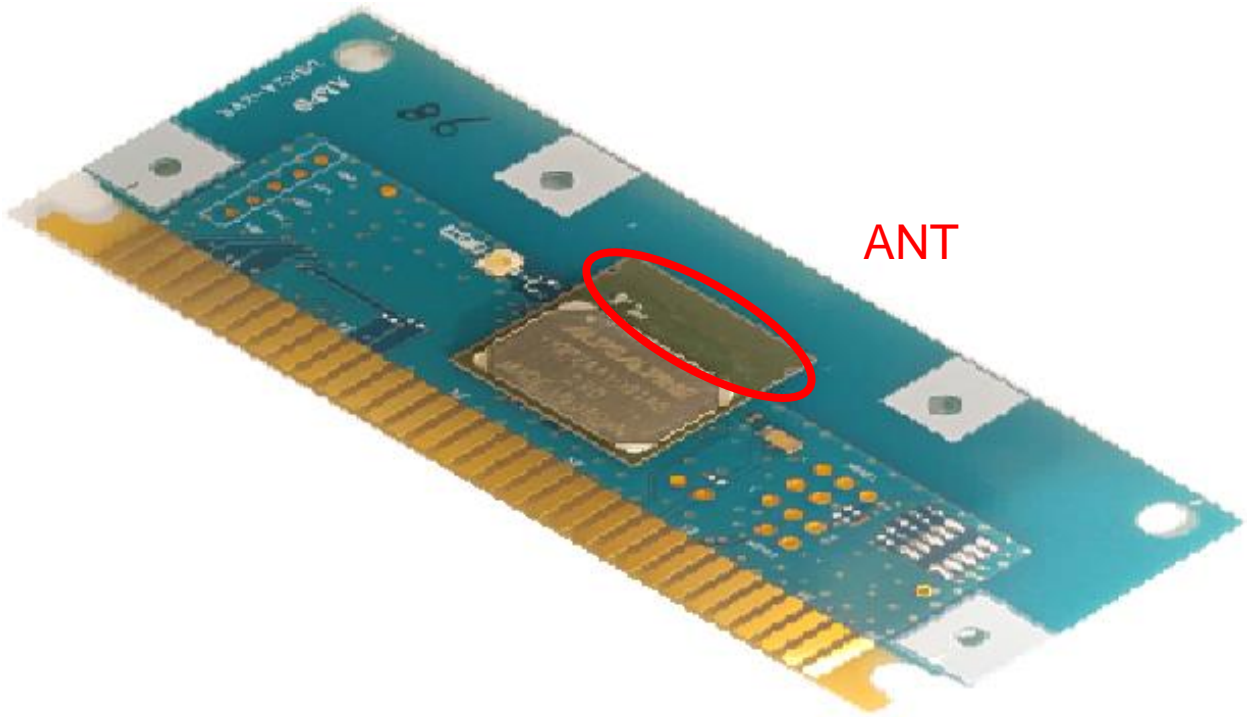
Section1. Antenna Assembly Specification

Antenna Assembly Summary:

Connector Type: None

Location of Measurement: ALPS ELECTRIC CO., LTD/

6-3-36, Furukawanakazato, Osaki-city, Miyagi-pref 989-6181, Japan

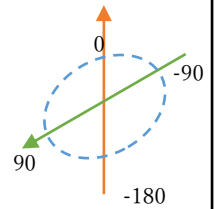
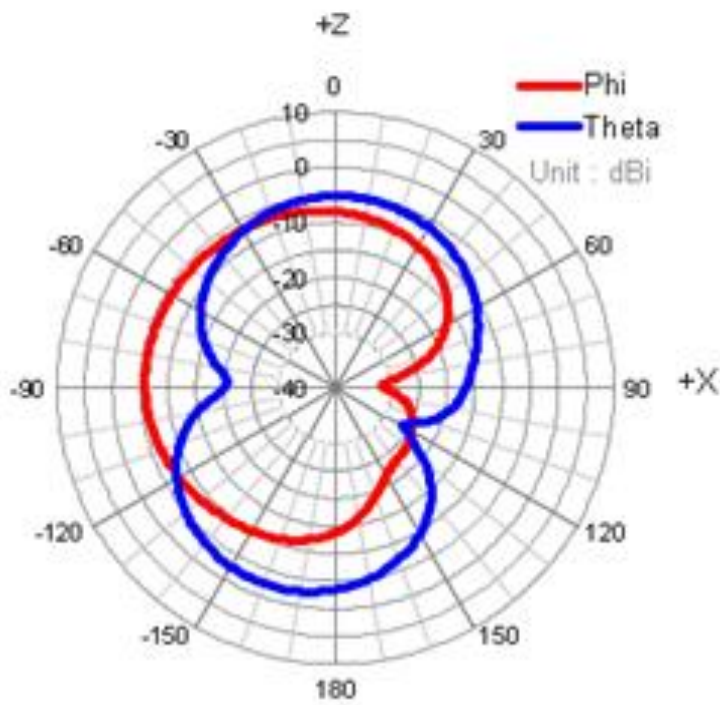
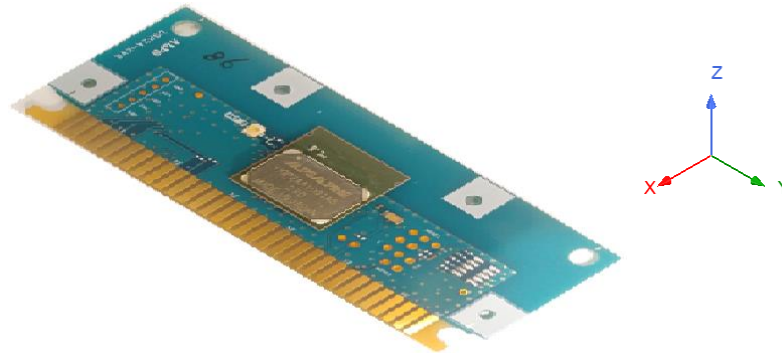


Freq[GHz]	2.4	2.442	2.5
VSWR	1.8	1.1	2.2
Total AVG Gain (dBi)	-2.9		
Peak gain Phi (dBi)	2.1		
Peak gain Thete (dBi)	0.1		

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Section2.Radiation characteristics of antenna in free space

Z-X Plane

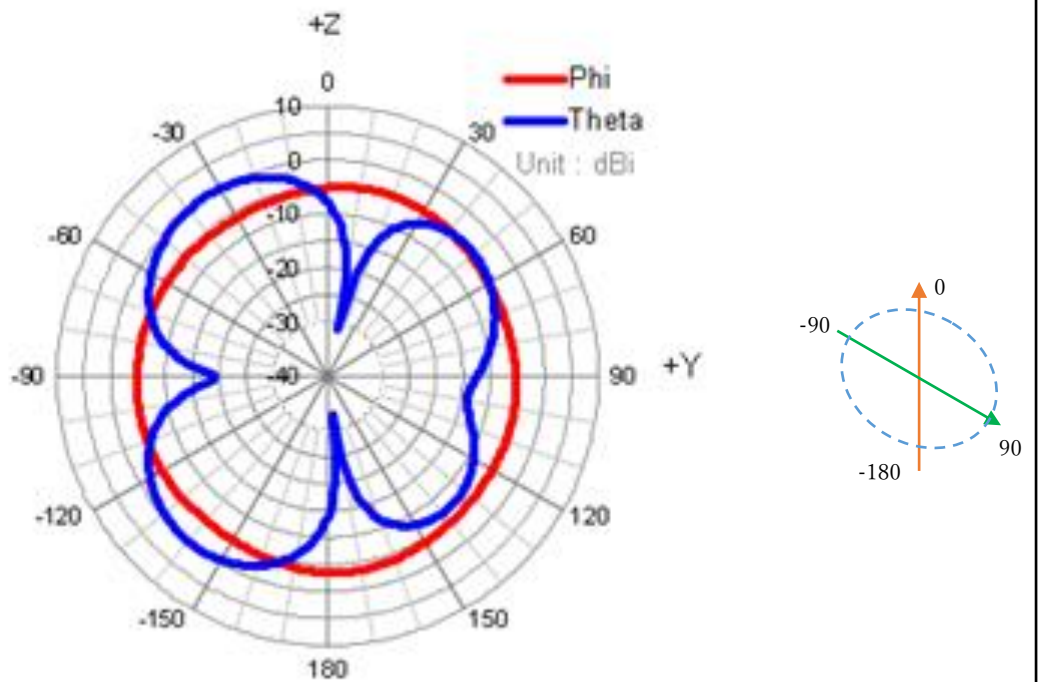
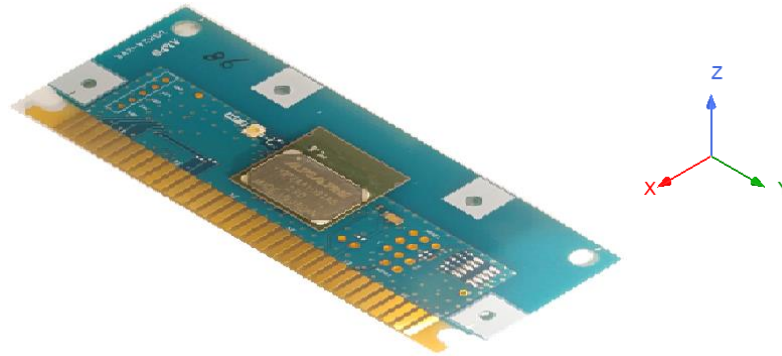


Unit:dBi

Polarization	Gain Phi	Gain Theta
Peak Gain	-5.8	-2.3
Average Gain	-9.6	-7.3
Total Average Gain	-5.3	

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Z-Y Plane

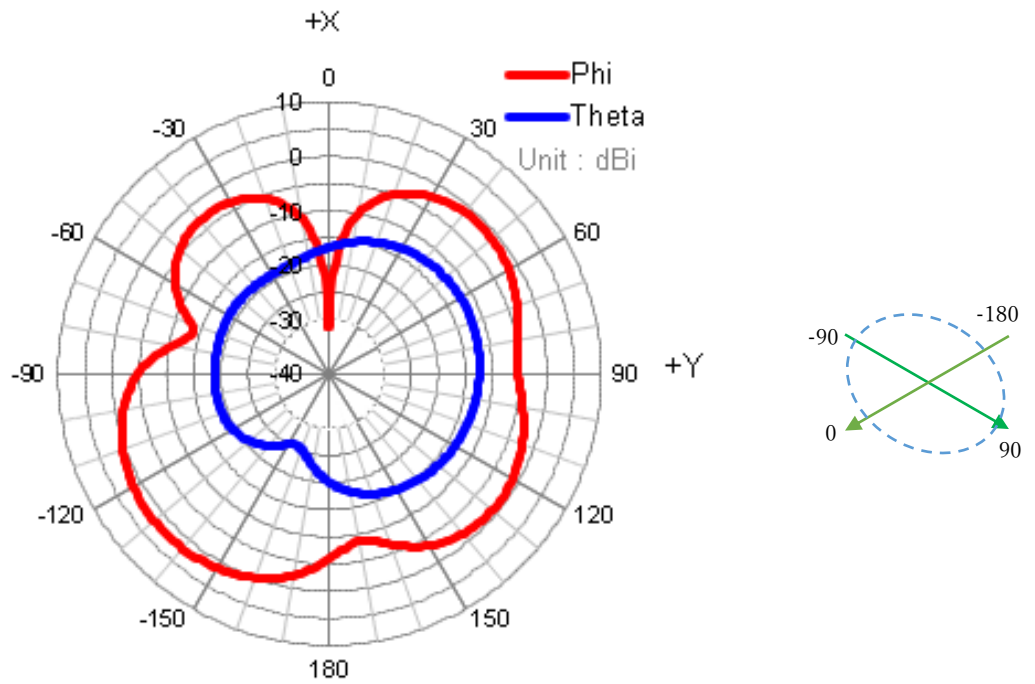
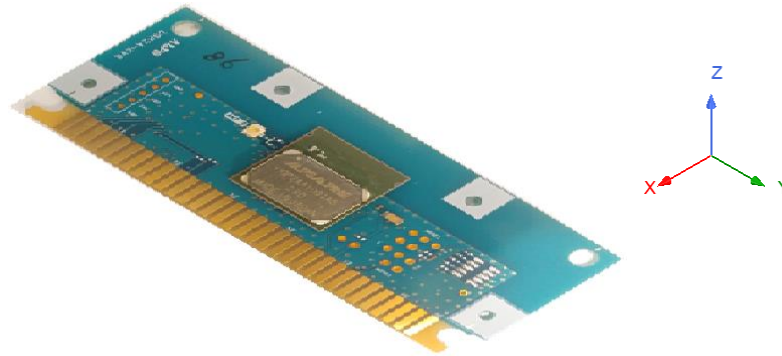


Unit:dBi

Polarization	Gain Phi	Gain Theta
Peak Gain	-3.4	0.1
Average Gain	-4.9	-4.7
Total Average Gain	-1.8	

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X-Y Plane



Unit:dBi

Polarization	Gain Phi	Gain Theta
Peak Gain	2.1	-12.1
Average Gain	-2.5	-15.7
Total Average Gain	-2.3	

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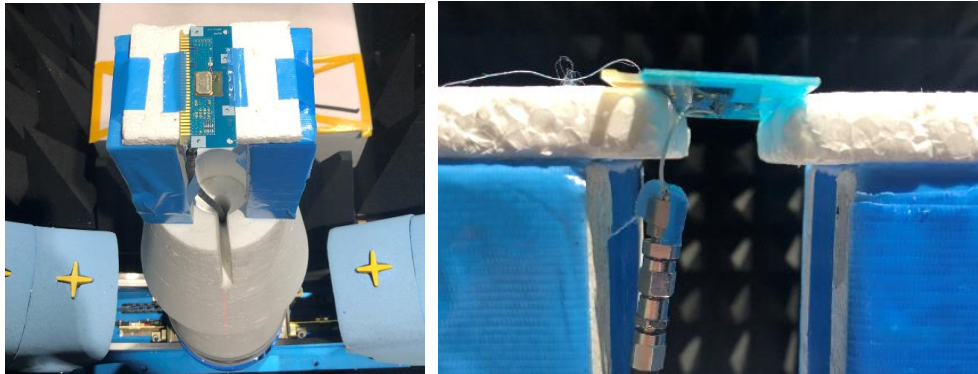
2. Test Information

Test Equipment	Name: Multi-probe system Model Name: SG32 Calibration date: 07.09.2022
Test software	Satenv Ver 2.0.1.3 build47 SatMap Ver 1.3.2.1
Test date	14.09.2022
Test Operator	K.Yasui

3. Test Method

- 1) Calibration
 - Reference antenna measurement
 - Processing measured Reference Antenna Data
- 2) DUT measurement
 - DUT measurement
 - Processing measured DUT Data

4. Test Setups



5. Photographs of the DUT



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