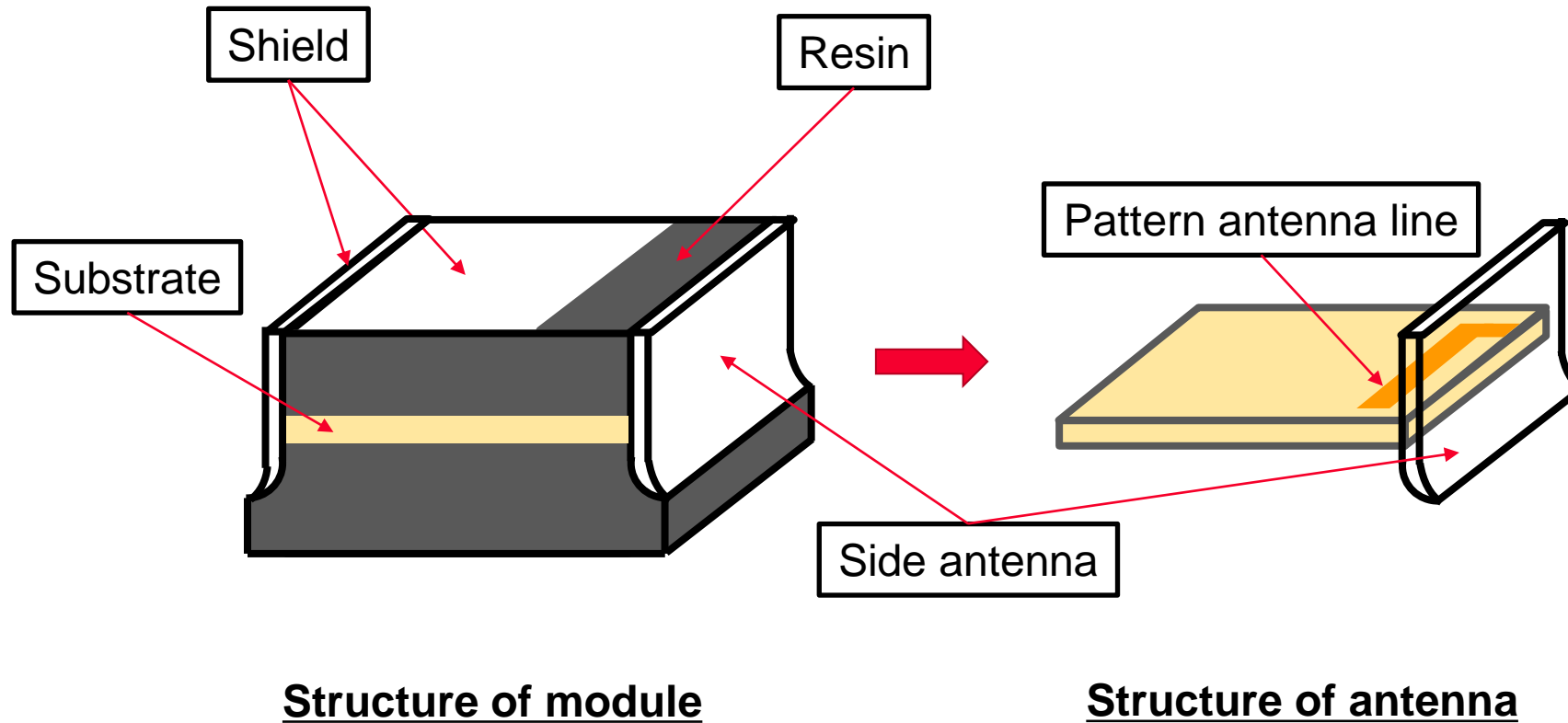


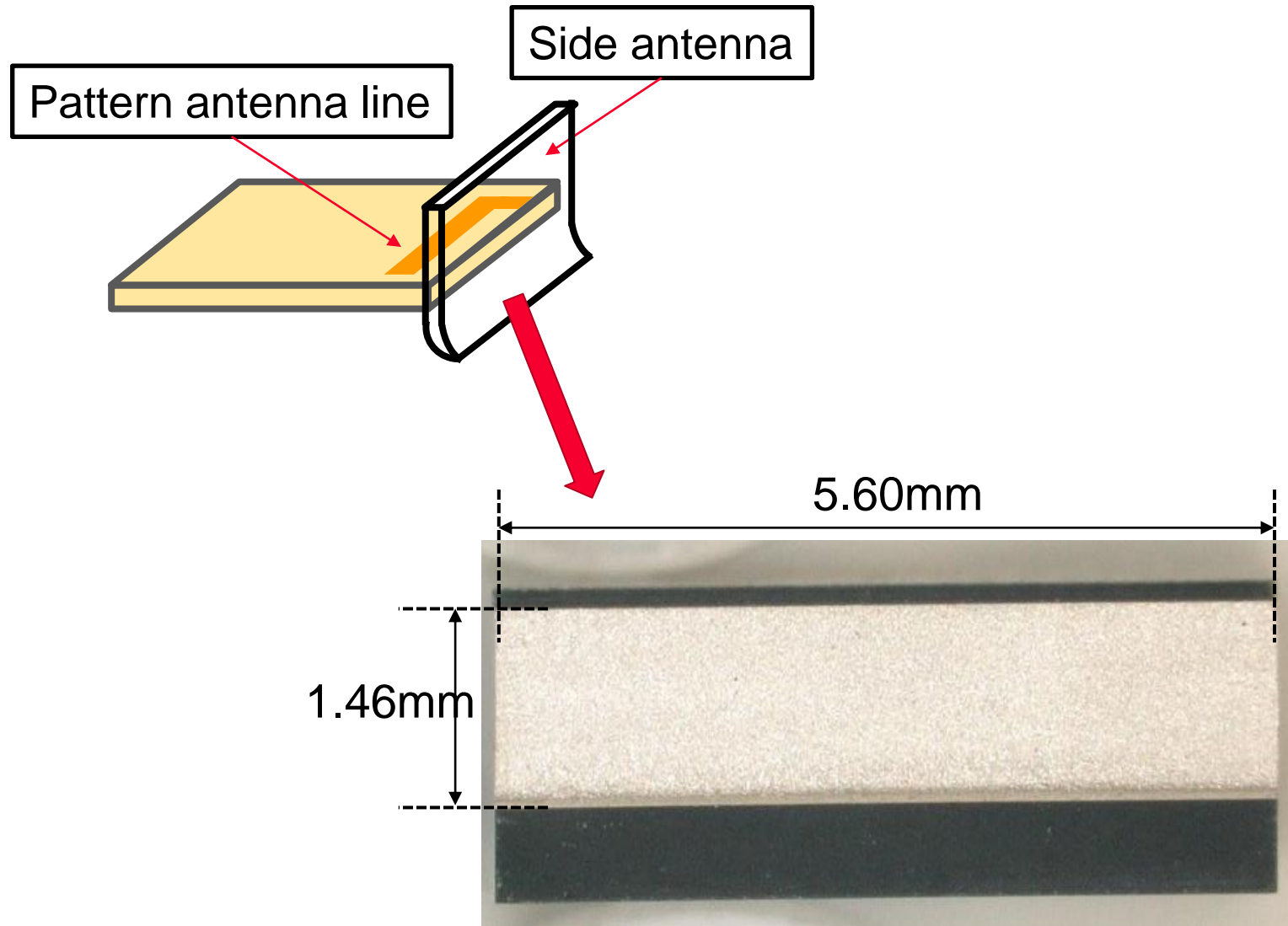
2JV (Slim/Tandem) Antenna specification





The antenna consists of chips on the surface of the board, an electrode line, and a wall surface.

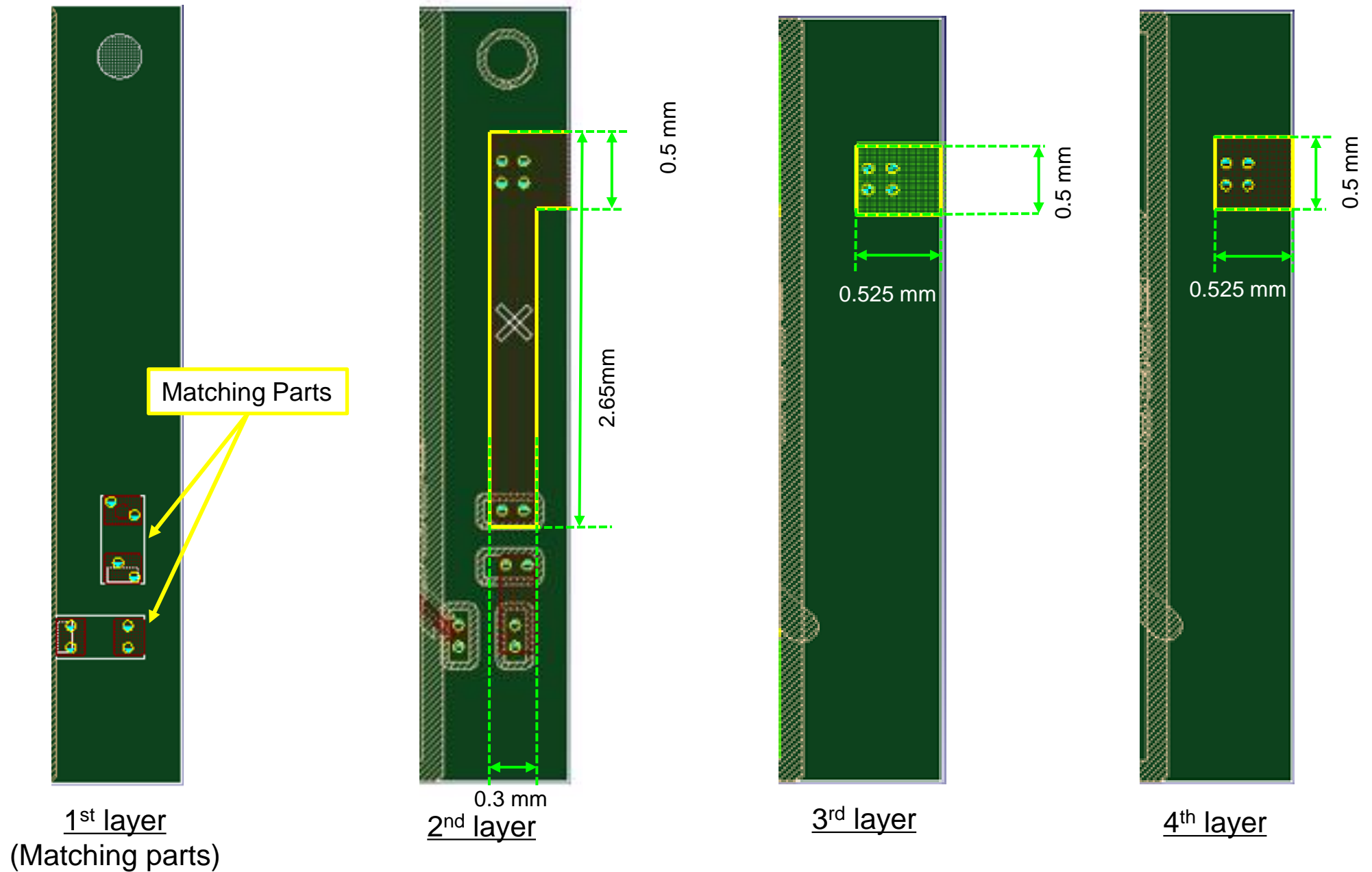
Antenna Size (Dimension)



Size of side-antenna

Confidential

Antenna Size (Dimension)



Antenna specific on EVB

Slim

- Antenna P/N : Internal Trace Antenna monopole
- Type : Pattern Antenna monopole
- Antenna Gain : + 1.0 dBi
- Frequency : 2400-2484MHz

Tandem

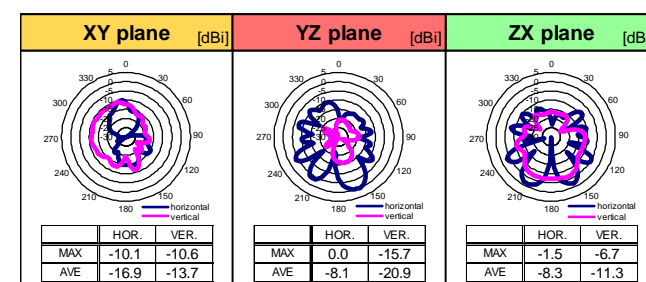
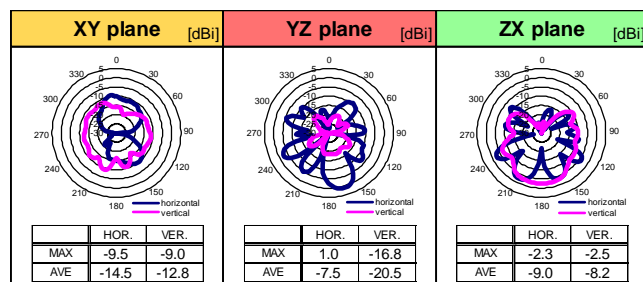
- Antenna P/N : Internal Trace Antenna monopole
- Type : Pattern Antenna monopole
- Antenna Gain : + 0 dBi
- Frequency : 2400-2484MHz

Slim

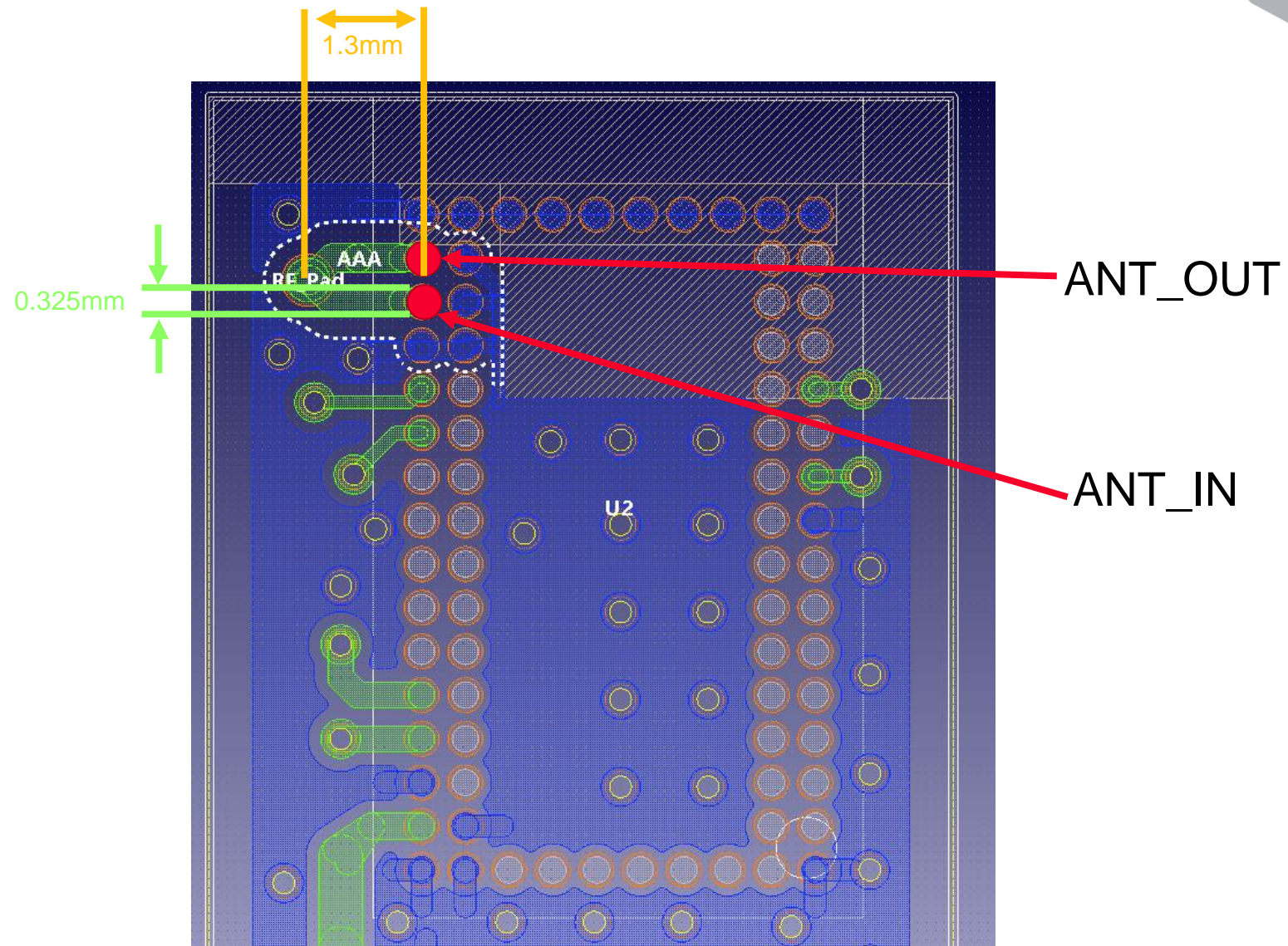
LINEAR POLAMIZATION		XY-plane		YZ-plane		ZX-plane		Total Efficiency
		hor.	ver.	hor.	ver.	hor.	ver.	
2400 MHz	MAX.	-9.1	-9.4	0.6	-16.9	-2.6	-3.2	-7.8
	AVE.	-15.1	-14.0	-8.0	-21.6	-9.3	-8.8	
2442 MHz	MAX.	-9.5	-9.0	1.0	-16.8	-2.3	-2.5	-7.3
	AVE.	-14.5	-12.8	-7.5	-20.5	-9.0	-8.2	
2484 MHz	MAX.	-10.5	-10.5	-0.4	-17.4	-3.5	-3.4	-8.4
	AVE.	-15.7	-13.4	-8.8	-21.1	-10.2	-9.2	

Tandem

LINEAR POLAMIZATION		XY-plane		YZ-plane		ZX-plane		Total Efficiency
		hor.	ver.	hor.	ver.	hor.	ver.	
2400 MHz	MAX.	-11.4	-12.4	-1.2	-16.8	-2.8	-8.0	-9.1
	AVE.	-18.0	-15.2	-9.4	-22.9	-9.6	-12.5	
2442 MHz	MAX.	-10.1	-10.6	0.0	-15.7	-1.5	-6.7	-7.9
	AVE.	-16.9	-13.7	-8.1	-20.9	-8.3	-11.3	
2484 MHz	MAX.	-12.2	-11.2	-0.7	-18.1	-2.1	-7.1	-8.2
	AVE.	-16.8	-14.6	-8.7	-23.4	-8.6	-11.7	



EVB for Slim



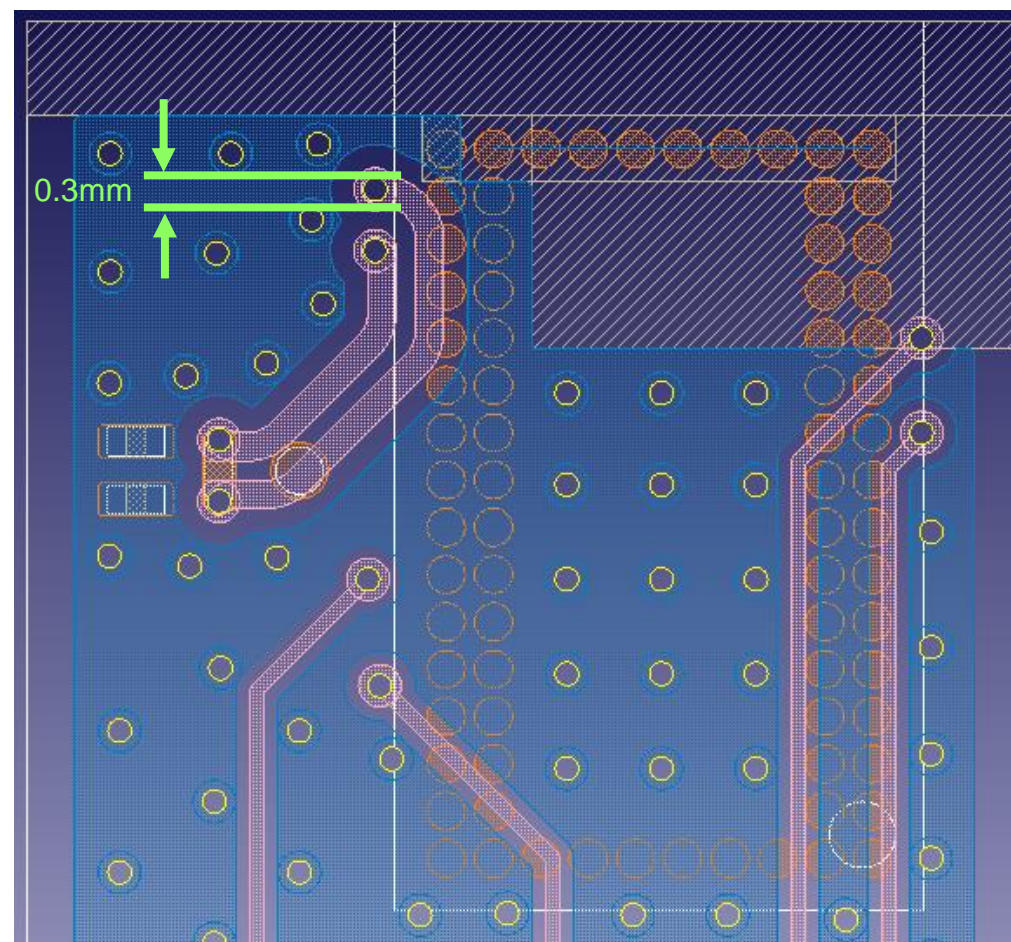
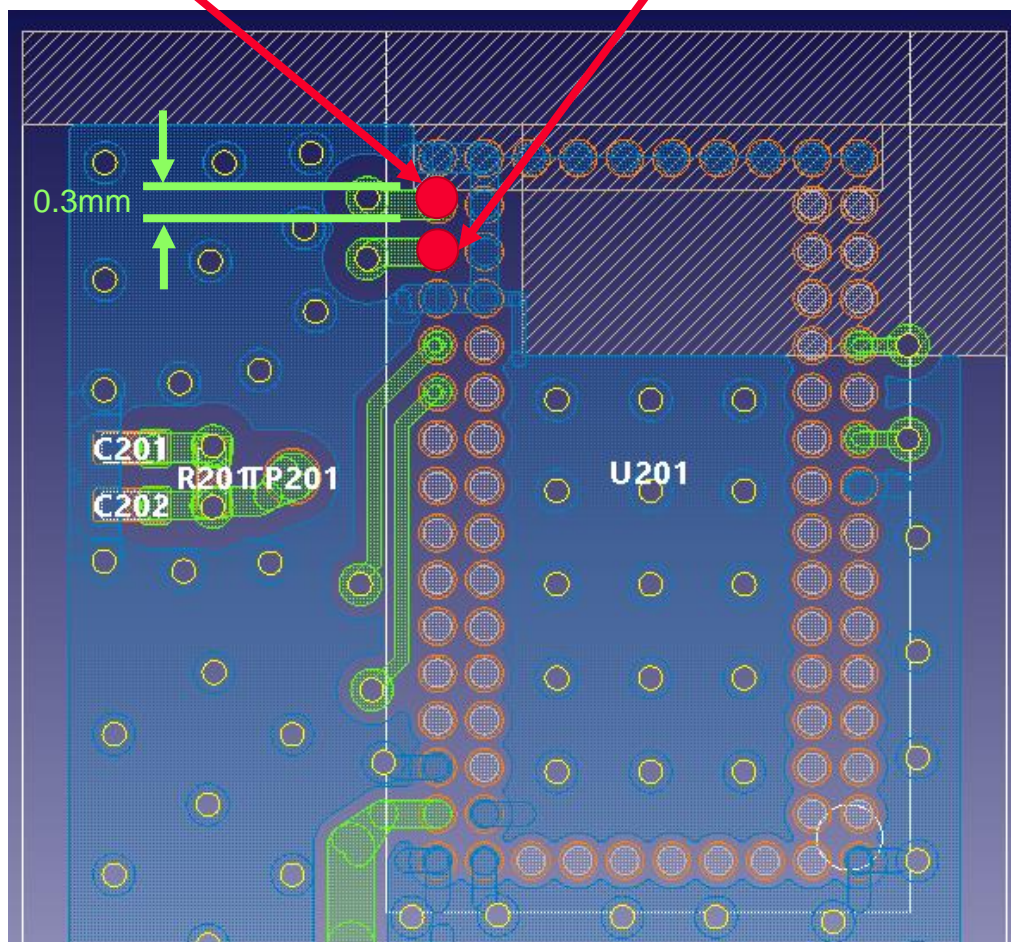
EVB for Tandem

ANT_OUT

表層

ANT_IN

裏層



Measurement Conditions for Antenna

Kanazawa Murata Mfg. Co., Ltd
Antenna Technical Support Section



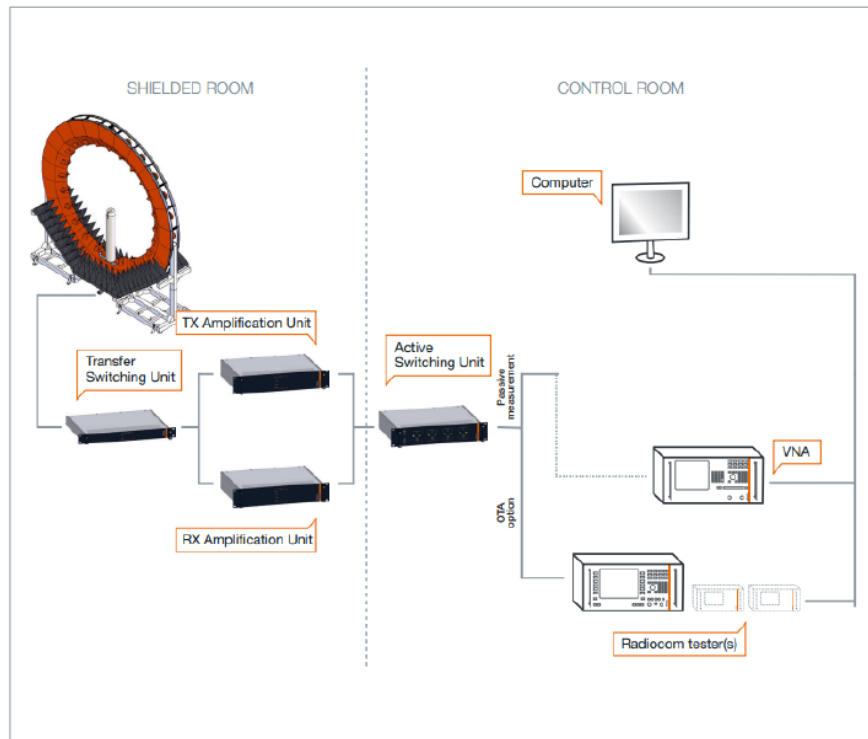
- Test method for antenna gain measurement:
Standard antenna method (comparative method)
 - * Comparing a measured antenna to a standard antenna with a known gain factor
- Equipment used for antenna gain measurement (model name, serial number, calibration date, etc.);
 - Measurement system
Microwave Vision Group (former SATIMO) SG32 (details next page)
 - Equipment
P9374A (MY57213280)
E4438C (MY45090139)
E4428C (MY45280466)
 - Calibration date
June, 2023
 - Antenna gain measurement date / Measurement person
Slim Feb 19, 2024 / Rie Ichimura
Tandem Feb 26, 2024 / Rie Ichimura

Details of SG32



Anechoic chamber size		Approximately 3.5m x 3.5m x 3m (H)
Frequency band		650~18000MHz
Measurement time	Elevation 1 cut	Real time
	Global surface measurement	< Approx. 120 seconds (when measuring 40 frequencies)
Measurement uncertainty	Peak gain	< +/-0.9dB (0.65~1.0GHz)
		< +/-0.8dB (1.0~18.0GHz)
	Low gain	< +/-3.0dB (0.65~1.0GHz)
		< +/-2.4dB (1.0~6.0GHz) < +/-2.2dB (6.0~18.0GHz)
Dynamic range		>70dB(0.65~6.0GHz) >68-42dB(6.0~18.0GHz)
Cross Polar Isolation		> 45dB

DUT size	Sampling cycle	0.65 GHz	1.0 GHz	2.5 GHz	6 GHz	10 GHz	18 GHz
	x1		75 cm	84 cm	65 cm	27 cm	18 cm
X3		75 cm	84 cm	84 cm	82 cm	50 cm	28 cm
X5		75 cm	84 cm	84 cm	84 cm	82 cm	45 cm
x10		75 cm	84 cm	84 cm	84 cm	84 cm	84 cm



Peak gain variation is secured within ± 0.90 dB by system calibration.

[2JV]

