

APPROVAL SHEET

Customer Name: **TPV**

Date: **2018/04/27**

Doc. Version: **1**

OEM P/N	317GAAWA630WNC
WNC P/N	81.EK615.G66
Description	ALBERTVILLE, 24TV WIFI MAIN ANTENNA, EK6-TP1
Version	1A

Provided By Wistron NeWeb Corp	Reviewed By Wistron NeWeb Corp	Approved By Customer
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1. Introduction

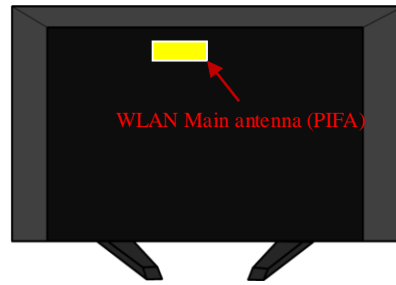
Antenna for 802.11a+n+g system

WLAN MAIN antenna (PIFA)

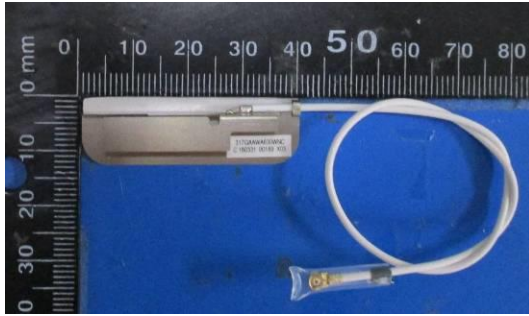
1. Location: Top Middle of the TV Back Panel
2. Cable length : 209 mm, White (connector with Φ 1.37mm RF cable)



Front View



Back View

	WLAN MAIN Antenna
Position	Top Middle of the TV Back Panel
Antenna Type	PIFA
Cable	Cable color : White, 1.37 (dia) x 209mm , RF connector
Weight	2.79 g
Photos	

2. Revision History

Date	Version	Revision History
04/25/18	1	New Release

3. Product Specifications

3.1 Specifications of Antenna Design

3.1.1 VSWR

WLAN	IEEE 802.11 g/n			IEEE 802.11 a/n		
	2400MHz	2450MHz	2483MHz	5150MHz	5470MHz	5850MHz
VSWR	<2			<2		

3.1.2 Efficiency

WLAN	IEEE 802.11 g/n			IEEE 802.11 a/n		
	2400MHz	2450MHz	2483MHz	5150MHz	5470MHz	5850MHz
Efficiency	>40%			>50%		

3.2 Mechanical Specifications

See the attached drawing.

1

2

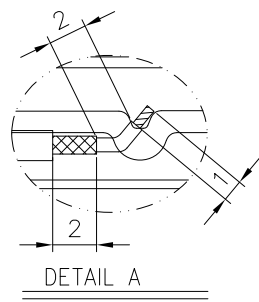
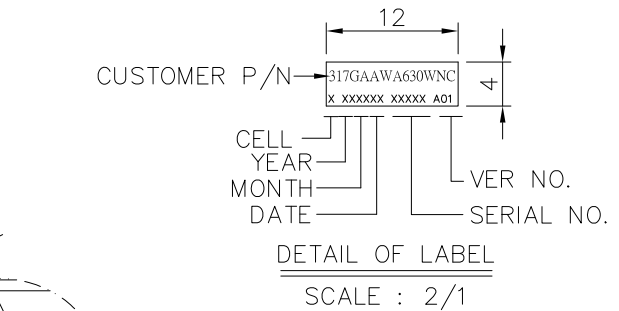
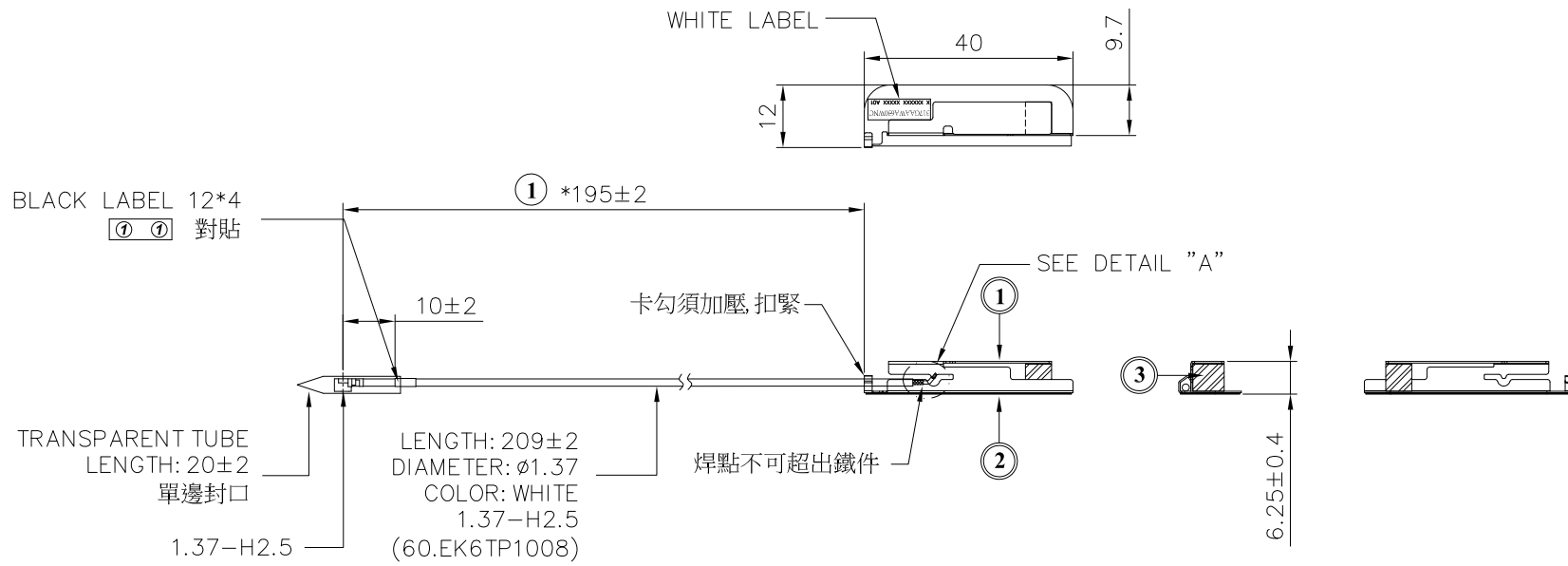
WNC CONFIDENTIAL

PART NUMBER BLOCK		CUSTOMER P/N BLOCK		CONFIRM ANTENNA SPEC.	
PART NUMBER	REV	PART NUMBER	REV	APPROVED	DATE
57.EK615.066	1	317GAAWA630WNC	A01	YANG SHUN LIU	06/20/18

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	1	RELEASE TO FILE	06/20/18	VINCENT CC LIN

A

A



"*"ARE THE CRITICAL DIMENSIONS

3	3T.EK6C3.00A	BUFFER, 32" _1, HH48C, EK6-C3	EA	1
2	3T.EK6TP.003	PLATE, AL FOIL, BT-43, EK6-TP1	EA	1
1	3S.EK6TP.00D	ANTENNA, SUS-1, BT-24, EK6-TP1	EA	1
ITEM	PART NO.	DESCRIPTION	UNIT	QTY

ONLY ME PARTS REFERENCE

81.EK615.G66	EK6-TP1
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN mm AND TOLERANCES ARE:			
INTEGER DIMENSIONS	±0.2	ANGULAR DIMENSIONS	±1°
1 PLACE DECIMAL	±0.1	HOLES UNDER Ø5.00	±0.05
2 PLACE DECIMALS	±0.05		
MATERIAL: NA			
FINISH: NA			
THIRD ANGLE PROJECTION	DRAWN	STACY CHANG	06/20/18
	ENGR	YANG SHUN LIU	06/20/18
	APVD	VINCENT CC LIN	06/20/18

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DWG TITLE
ALBERTVILLE, 24TV WIFI MAIN ANTENNA, EK6-TP1

SIZE DWG NO. 57.EK615.066 REV 1

SCALE 1/1 SHEET 1 OF 1

1

2

B

B

3.3 Antenna Material List

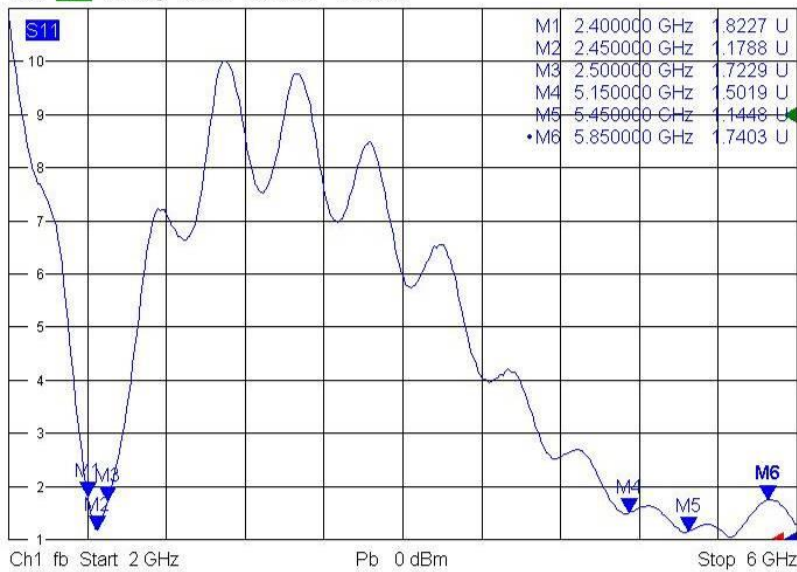
Items	Description
Antenna	3S.EK6TP.006WS
Cable	Φ1.37 Cable(White)
Connector	IPEX
Adhesive	TT219
BUFFER	HH48C

4. Antenna Performance

4.1 VSWR

Main

Trc1 S11 SWR 1 U / Ref 1 U Cal 1
 Trc2 S22 SWR 1 U / Ref 1 U Invisible
 Trc3 S21 dB Mag 10 dB / Ref 0 dB Invisible



3/8/2018, 9:48 PM

4.2 Efficiency data

Main

Freq(GHz)	Efficiency(%)	Efficiency(dB)
2400	45.58	-3.41
2450	52.76	-2.78
2500	49.2	-3.08
5150	50.04	-3.01
5250	50.85	-2.94
5350	56.9	-2.45
5470	59.42	-2.26
5600	56.71	-2.46
5725	61.05	-2.14
5785	61.18	-2.13
5850	61.18	-2.13

4.3 Peak Gain

Frequency (MHz)	Gain (dBi)
2400	1.94
2450	2.02
2500	1.22
5150	4.34
5250	4.25
5350	4.56
5470	4.58
5600	4.50
5725	4.24
5785	5.13
5850	5.20

