

APPROVAL SHEET

Customer Name: **TPV**

Date: **2018/04/27**

Doc. Version: **1**

OEM P/N	317GAAWA617WNC
WNC P/N	81.EK615.G57
Description	MINNETONKA, 43TV WIFI AUX ANTENNA, EK6-TP1
Version	1A

Provided By Wistron NeWeb Corp	Reviewed By Wistron NeWeb Corp	Approved By Customer
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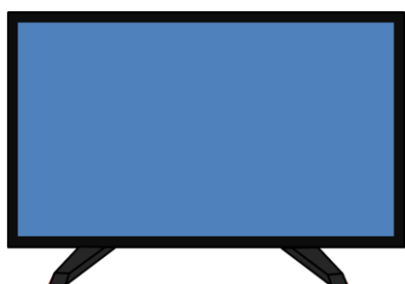
- 1. Introduction**
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- 3. Product Specifications**
- 4. Antenna Performance**

1. Introduction

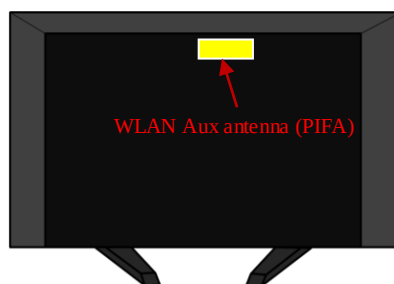
Antenna for 802.11a+n+g system

WLAN AUX antenna (PIFA)

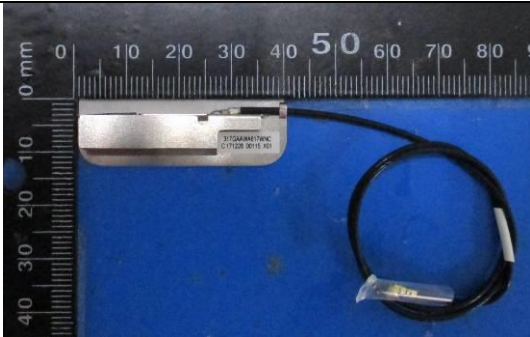
1. Location: Top Middle of the TV Back Panel
2. Cable length : 299 mm, Black (connector with Φ 1.37mm RF cable)



Front View



Back View

	WLAN AUX Antenna	
Position	Top Middle of the TV Back Panel	
Antenna Type	PIFA	
Cable	Cable color : Black, 1.37 (dia) x 299mm , RF connector	
Weight	3.17 g	
Photos		

2. Revision History

Date	Version	Revision History
04/27/18	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.

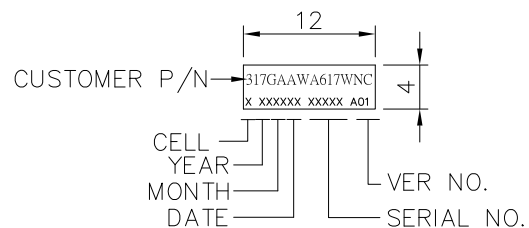
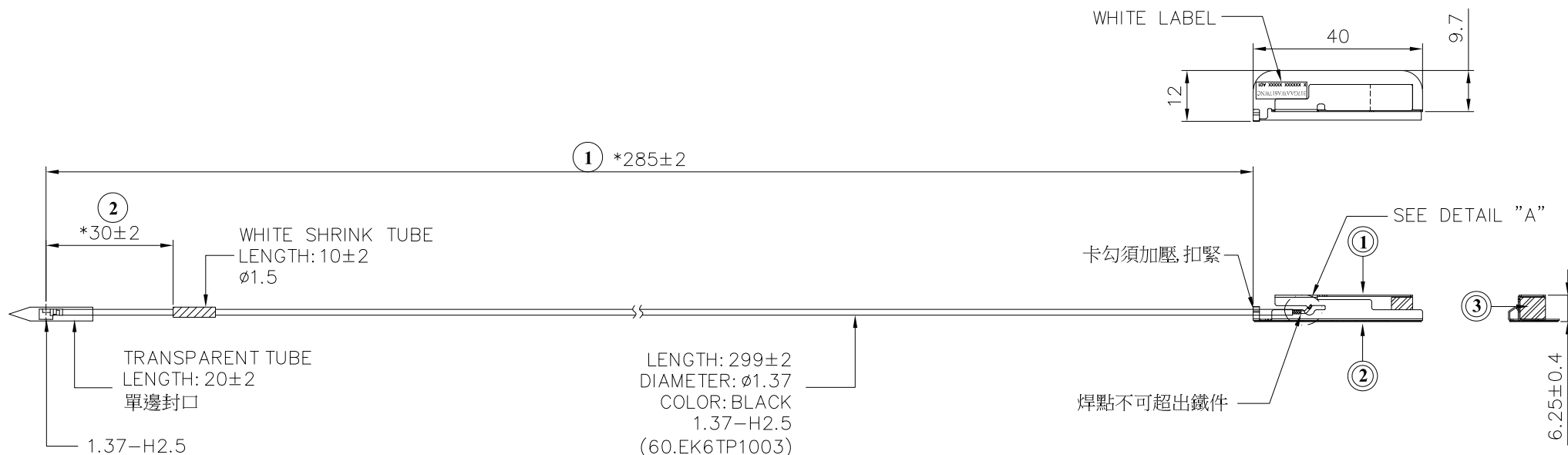
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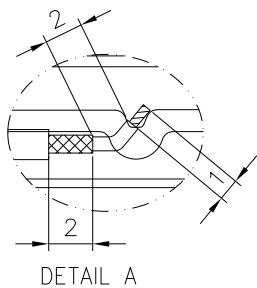
WNC CONFIDENTIAL

PART NUMBER BLOCK		CUSTOMER P/N BLOCK		CONFIRM ANTENNA SPEC.	
PART NUMBER	REV	PART NUMBER	REV	APPROVED	DATE
57.EK615.057	1	317GAAWA617WNC	A01	YANG SHUN LIU	05/09/18

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	1	RELEASE TO FILE	05/09/18	VINCENT CC LIN



DETAIL OF LABEL
SCALE : 2/1



SCALE: 4/1

"*"ARE THE CRITICAL DIMENSIONS

3	3T.EK6TP.001	BUFFER, BT-43, EVA60, EK6-TP1	EA	1
2	3T.EK6TP.003	PLATE, AL FOIL, BT-43, EK6-TP1	EA	1
1	3S.EK6TP.009	ANTENNA, SUS-1, BT-43, EK6-TP1	EA	1
ITEM	PART NO.	DESCRIPTION	UNIT	QTY

ONLY ME PARTS REFERENCE

		UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN mm AND TOLERANCES ARE: INTEGER DIMENSIONS ± 0.2 1 PLACE DECIMAL ± 0.1 2 PLACE DECIMALS ± 0.05				ANGULAR DIMENSIONS ± 1° HOLES UNDER Ø5.00 ± 0.05		WNC Wistron NeWeb Corp. 啟碁科技股份有限公司 20 Park Avenue II, Hsinchu Science Park, Hsinchu 308, Taiwan, R.O.C. Tel: 886-3-6667799 Fax: 886-3-5788726		
		MATERIAL: NA				DWG TITLE				
		FINISH: NA				MINNETONKA, 43TV WIFI AUX ANTENNA, EK6-TP1				
81.EK615.G57	EK6-TP1		THIRD ANGLE PROJECTION	DRAWN	STACY CHANG	05/09/18	SIZE	DWG NO.		REV
NEXT ASSY	USED ON		ENGR	YANG SHUN LIU	05/09/18	A3	57.EK615.057		1	
APPLICATION			APVD	VINCENT CC LIN	05/09/18	SCALE	1/1		SHEET	1 OF 1

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3.3 Antenna Material List

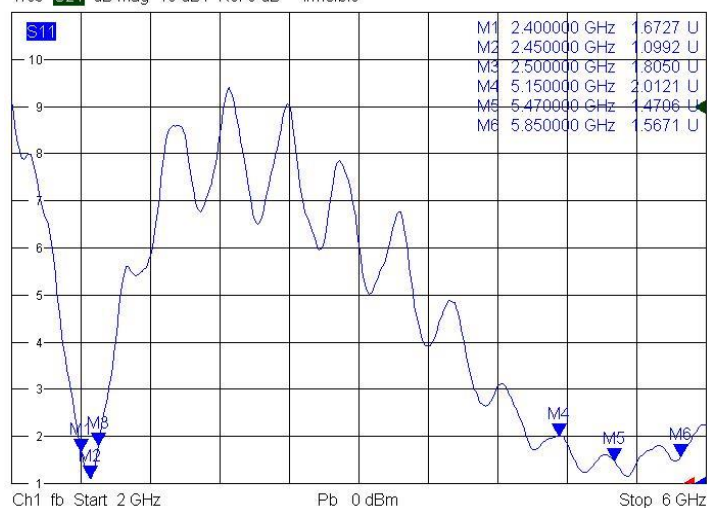
Items	Description
Antenna	3S.EK6TP.004ST
Cable	Φ1.37 Cable(Black)
Connector	IPEX
Adhesive	王佳 TT219
BUFFER	EVA60

4. Antenna Performance

4.1 VSWR

Aux

Trc1 S11 SWR 1 U / Ref 1 U Cal int Offs 1 (Max)
 Trc2 S22 SWR 1 U / Ref 1 U Invisible
 Trc3 S21 dB Mag 10 dB / Ref 0 dB Invisible



4.2 Efficiency data

Aux

Freq(GHz)	Efficiency(%)	Efficiency(dB)
2400	45	-3.47
2450	53.85	-2.69
2500	46.82	-3.3
5150	54.47	-2.64
5250	55.52	-2.56
5350	60.69	-2.17
5470	57.66	-2.39
5600	54.51	-2.63
5725	53.84	-2.69
5785	53.22	-2.74
5850	51.79	-2.86

4.3 Peak Gain

Frequency (MHz)	Gain (dBi)
2400	0.85
2450	1.73
2500	0.87
5150	2.79
5250	3.70
5350	3.88
5470	3.51
5600	2.93
5725	2.81
5785	3.22
5850	2.90

4.4 Antenna Pattern

Aux

