



# DATA SHEET



## AWM661TX

### 5.8GHz Transmitter Module

承認	品保	工程
Approve	QA	E/E



大紘科技股份有限公司

新竹科學工業園區工業東九路 9 號 4 樓 電話: 03-577-8099 傳真:035778199

4F, No.9 Industry E. 9<sup>th</sup> RD., Science-Based Industrial Park, Hsinchu, Taiwan, R.O.C. TEL : 886-3-5778099 Fax 886-3-5778199



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### 1. Descriptions:

Airwave 5.8GHz Audio/Video wireless RF module contains one Transmitter and one Receiver. Using of the most popular 5.8GHz ISM band and being designed with high reliability, Airwave RF module can transmit/receive a wide band audio & video signals up to 500 feet in open area.

**AWM661TX: 14dBm**

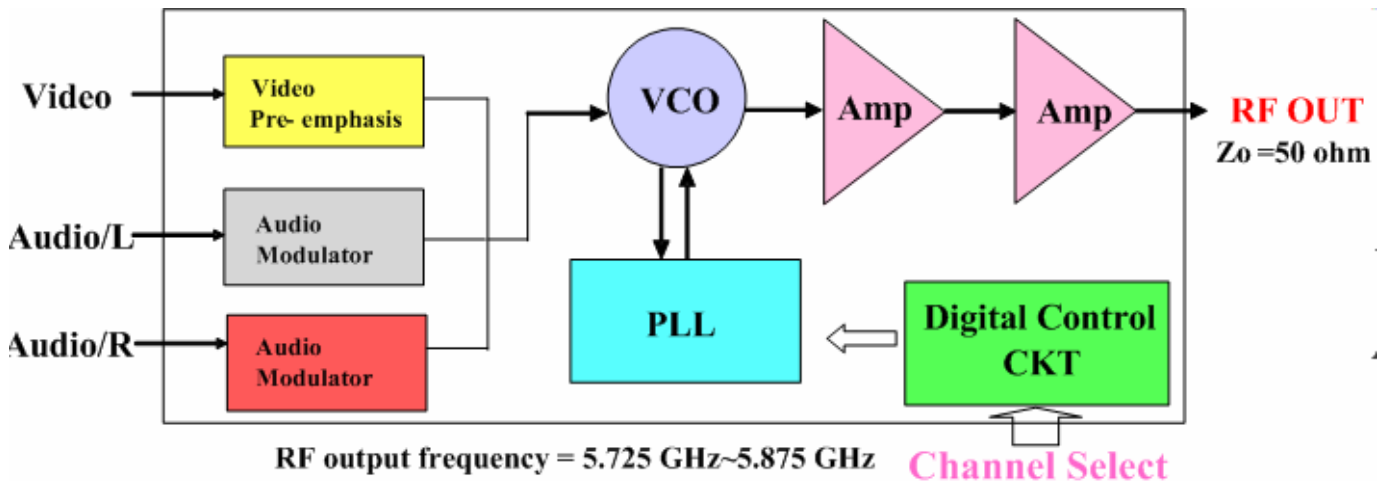
### 2. Feature:

- Use worldwide 5.8GHz ISM band
- Design in compact size and low power consumption
- Reach highly efficient FM-FM modulation/demodulation scheme
- Be compatible with both NTSC and PAL video formats
- Integrate Audio/Video input and output onto one module base-band PCB
- Don't need external Audio circuit
- Provide with 7 selectable channels
- Set tack switch for channel selection

### 3. Application:

- AV Sender
- Baby monitor
- Surveillance
- Wireless Camera

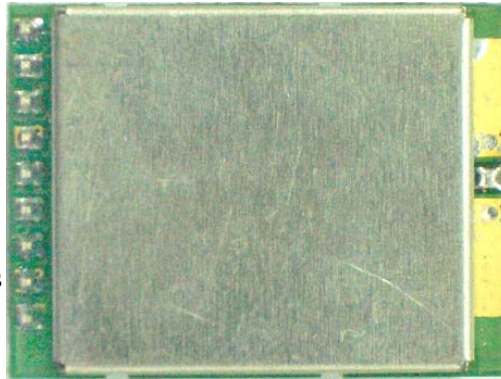
### 4. Function block





### 5. PIN Define

Pin01 BIT2  
 Pin02 BIT1  
 Pin03 BIT0  
 Pin04 A/R  
 Pin05 A/L  
 Pin06 Video  
 Pin07 Vcc  
 Pin08 Bypass  
 Pin09 GND



RFout Pin10

### 6. PIN Descriptions

#### AWM661TX

PIN	NAME	Descriptions	PIN	NAME	Descriptions
01	BIT2	see note1	06	Video	Video Input
02	BIT1		07	VCC	DC +5V power supply in
03	BIT0		08	BYPASS	Bypass capacitor
04	A/R	Audio Right CH Input	09	GND	Ground
05	A/L	Audio Left CH Input	10	RFout	RF output

#### Note1:

Pin3	Pin4	Pin5	Descriptions	Frequency
BIT2	BIT1	BIT0		
0	0	0	Pin 3, Pin 4, Pin 5 connect to GND.	5740MHz (CH1)
0	0	1	Pin 3 and Pin 4 connect to GND, Pin 5 OPEN.	5760MHz (CH2)
0	1	0	Pin 3 and Pin 5 connect to GND, Pin 4 OPEN.	5780MHz (CH3)
0	1	1	Pin 3 connect to GND, Pin 4 and Pin 5 OPEN.	5800MHz (CH4)
1	0	0	Pin 4 and Pin 5 connect to GND, Pin 3 OPEN.	5820MHz (CH5)
1	0	1	Pin 4 connect to GND, Pin 3 and Pin 5 OPEN.	5840MHz (CH6)
1	1	0	Pin 5 connect to GND, Pin 3 and Pin 4 OPEN.	5860MHz (CH7)
1	1	1	Pin 3, Pin 4, Pin 5 OPEN.	5860MHz (CH7)



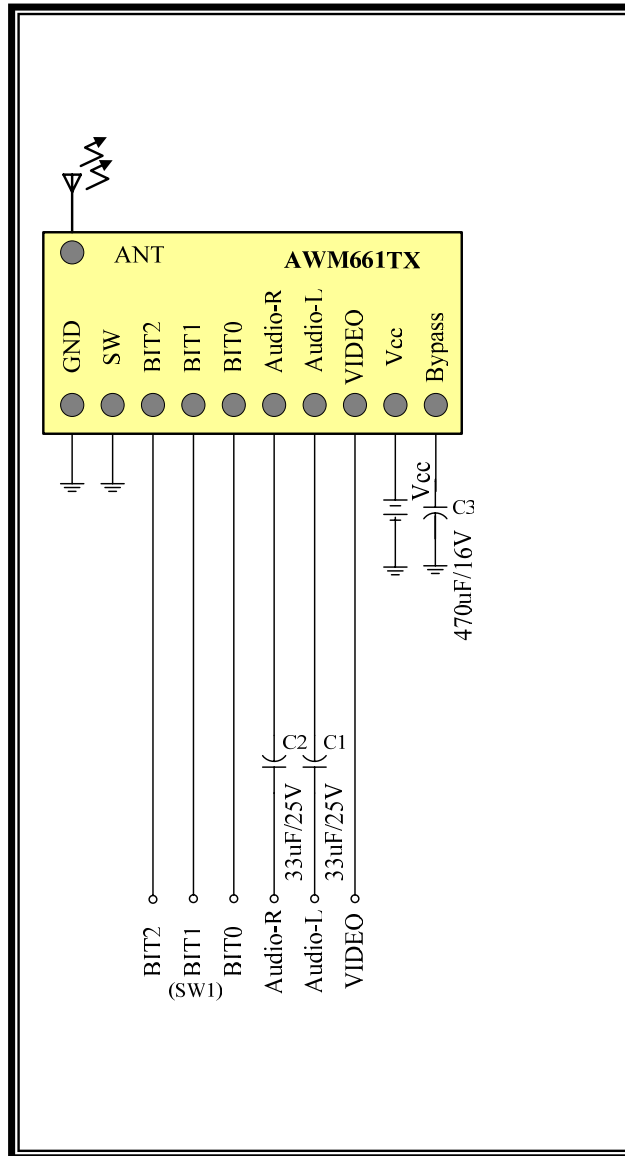
### 7. Absolute Maximum Ratings

Parameters	Model.	Min.	Typ.	Max.	Unit
Storage Temperature Range	AWM661TX	-40	-	85	°C
Supply voltage	AWM661TX	-0.5	-	5.5	V

### 8. DC/AC Electrical characteristic:

RF/ DC Parameters		Min.	Typ.	Max.	Unit
Supply voltage (DC)	AWM661TX	+4.8		+5.2	V
Supply current	AWM661TX	90		120	mA
RF output power	AWM661TX	12	14		dBm
Operating temperature		-10		60	°C
Carrier to Subcarrier Ratio	AWM661TX	25		27	dBc
RF Deviation- Video (Input 10KHz, 1Vpp)	AWM661TX		4		MHz
RF Deviation- Audio (Input 1KHz, 1.5Vpp)	AWM661TX	R	75		kHz
		L	75		
Antenna Port Impedance			50		Ohm
5.8GHz Carrier Frequency Accuracy			±300		kHz
Audio subcarrier frequency	left	6MHz			
	right	6.5MHz			
Operation Frequency Range		5725		5875	MHz
Channel Selection		PLL Synthesizer, 7CH (See Tab11)			
Channel Frequency		Ch1=5740, CH2=5760, CH3=5780 Ch4=5800, CH5=5820, CH6=5940 Ch7=5860			
Video-Audio Modulation/Demodulation Type		FM-FM			

9. Test circuit:



TX-DIP Switch Module



### 10. 參考電路用料清單

#### AWM661TX Demo Board DIP SW

品名規格	使用量	插件位置
E/CAP 33UF, 4*7 10V,SS010M0033SBT(LF)	2	C1,C2
E/CAP 470uF, 8*9 16V	3	C3,C4,C5
DIODES 1N4001, 1A/100V	1	D1
LED 紅色圓 MO34PD, SH-031-RR-L	1	D2
7805 Regulator	1	IC2
RCA PIN JACK 紅白黃, RCA-316	1	JACK3
DC POWER JACK(低錫), DS-210B 5.5mm	1	JACK1
0603 RESISTOR 680R, +-5% 1/16W RM06JTN683(LF)	1	R5
DIP SWITCH 指撥開關, DPL-03	1	SW1



11. Dimension:

