



DATA SHEET



AWM663TX

5.8GHz Transmitter Module

承認	品保	工程
Approve	QA	E/E



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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.

AWM663TX: 20dBm

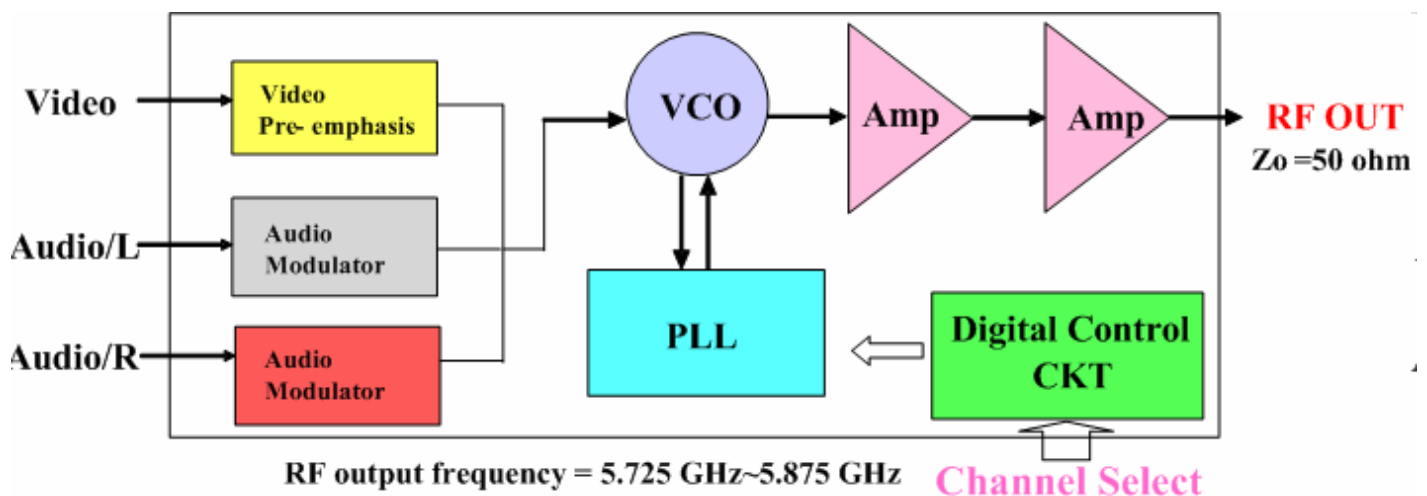
2. Feature:

- 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

AWM663TX

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:

Pin1	Pin2	Pin3	Descriptions	Frequency
BIT2	BIT1	BIT0		
0	0	0	Pin 1, Pin 2, Pin 3 connect to GND.	5740MHz (CH1)
0	0	1	Pin 1 and Pin 2 connect to GND, Pin 3 OPEN.	5760MHz (CH2)
0	1	0	Pin 1 and Pin 3 connect to GND, Pin 2 OPEN.	5780MHz (CH3)
0	1	1	Pin 1 connect to GND, Pin 2 and Pin 3 OPEN.	5800MHz (CH4)
1	0	0	Pin 2 and Pin 3 connect to GND, Pin 1 OPEN.	5820MHz (CH5)
1	0	1	Pin 2 connect to GND, Pin 1 and Pin 3 OPEN.	5840MHz (CH6)
1	1	0	Pin 3 connect to GND, Pin 1 and Pin 2 OPEN.	5860MHz (CH7)
1	1	1	Pin 1, Pin 2, Pin 3 OPEN.	5860MHz (CH7)



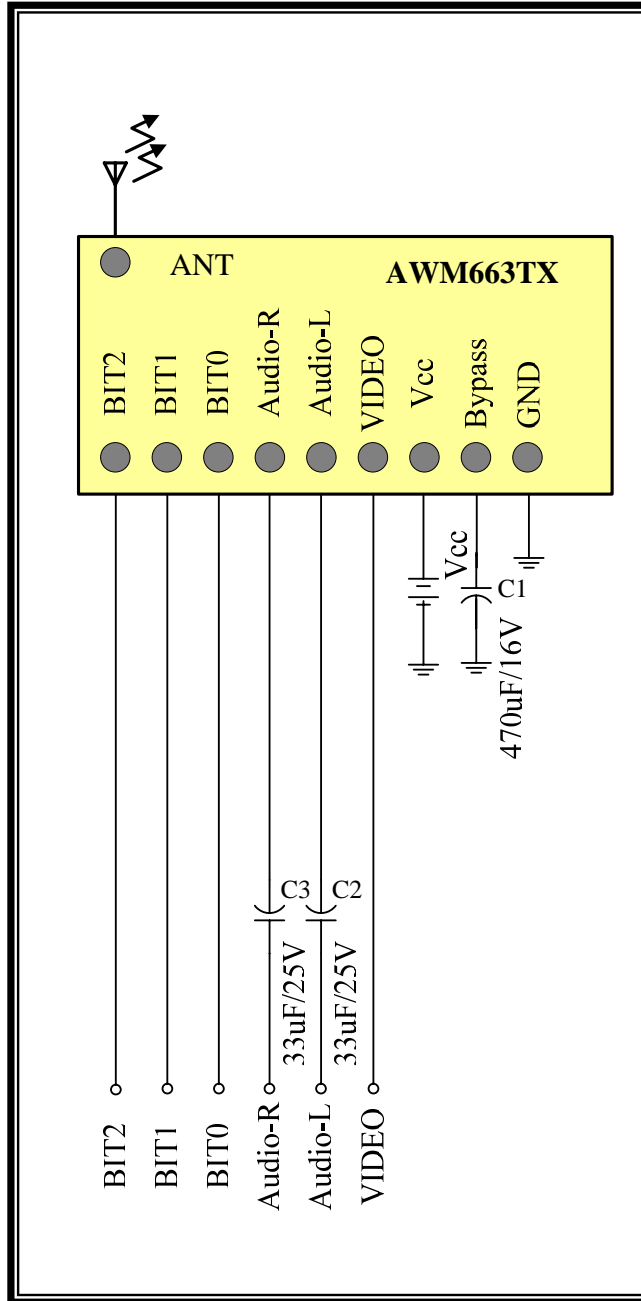
7. Absolute Maximum Ratings

Parameters	Model.	Min.	Typ.	Max.	Unit
Storage Temperature Range	AWM663TX	-40	-	85	°C
Supply voltage	AWM663TX	-0.5	-	5.5	V

8. DC/AC Electrical characteristic:

RF/ DC Parameters		Min.	Typ.	Max.	Unit
Supply voltage (DC)	AWM663TX	+4.8		+5.2	V
Supply current	AWM663TX	280	300	320	mA
RF output power	AWM663TX	19	20	23	dBm
Operating temperature		-10		60	°C
Carrier to Subcarrier Ratio	AWM663TX	25		29	dBc
RF Deviation- Video (Input 10KHz, 1Vpp)	AWM663TX		3.9		MHz
RF Deviation- Audio (Input 1KHz, 1.5Vpp)	AWM663TX	R	70		kHz
		L	70		
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 Tab1)			
Channel Frequency		Ch1=5740, CH2=5760, CH3=5780 Ch4=5800, CH5=5820, CH6=5840 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

AWM663TX Demo Board DIP SW

品名規格	使用量	插件位置
E/CAP 33UF, 4*7 10V,SS010M0033SBT(LF)	2	C2,C3
E/CAP 470uF, 8*9 16V	3	C1,C4,C5
DIODES 1N4001, 1A/100V	1	D1
LED 紅色圓 MO34PD, SH-031-RR-L	1	D2
AZ39151D4-5.0E1 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:

