



## Description

Airwave 2.4GHz Audio/Video wireless RF module contains one Transmitter and one Receiver. Using of the most popular 2.4GHz ISM band and designed with high reliability. Airwave RF module is compliance with the criteria of R&TTE which can transmit/receive a wide band audio & video signals up to around 300 feet in open area.

## Features

- Worldwide 2.4GHz ISM band
- Conform with R&TTE stipulation
- Compact size and low power consumption
- Highly efficient FM-FM modulation/demodulation scheme
- Compatible with both NTSC and PAL video formats
- Integrating Audio/Video input and output into one module base-band PCB
- No external Audio circuit needed

## TECHNICAL SPECIFICATION

### General

Operation Frequency Range	2400 ~ 2483MHz
Channel Selection	PLL Synthesizer, 4CH.
Channel Frequency	Ch1: 2414MHz, CH2: 2432MHz, CH3: 2450MHz, CH4: 2468MHz
Video-Audio Modulation/Demodulation Type	FM-FM
Operating Ambient Temperature	-10 ~ 60

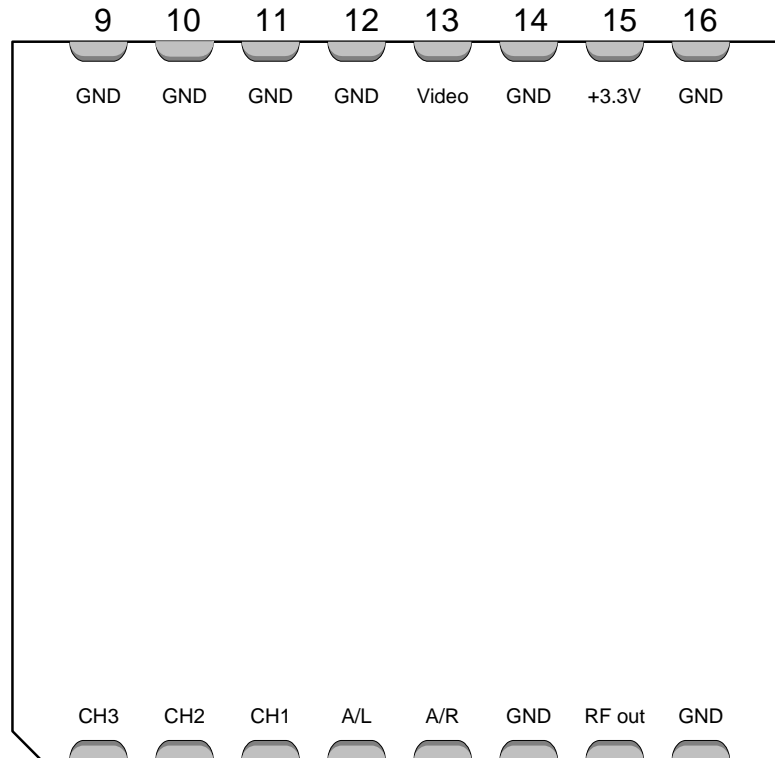
### Transmitter

Supply Voltage	DC + 3.3V
Supply Current	50mA, typ.
Output Power	9dBm $\pm$ 1dBm ( CE )
2.4GHz Carrier Frequency Accuracy	$\pm$ 100KHz, typ.
Antenna Port Impedance	50
Video Input Impedance	75
Video Input Level	1V <sub>P-P</sub> , typ.
Audio Input Level	3V <sub>P-P</sub> , max.

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### Pad Description



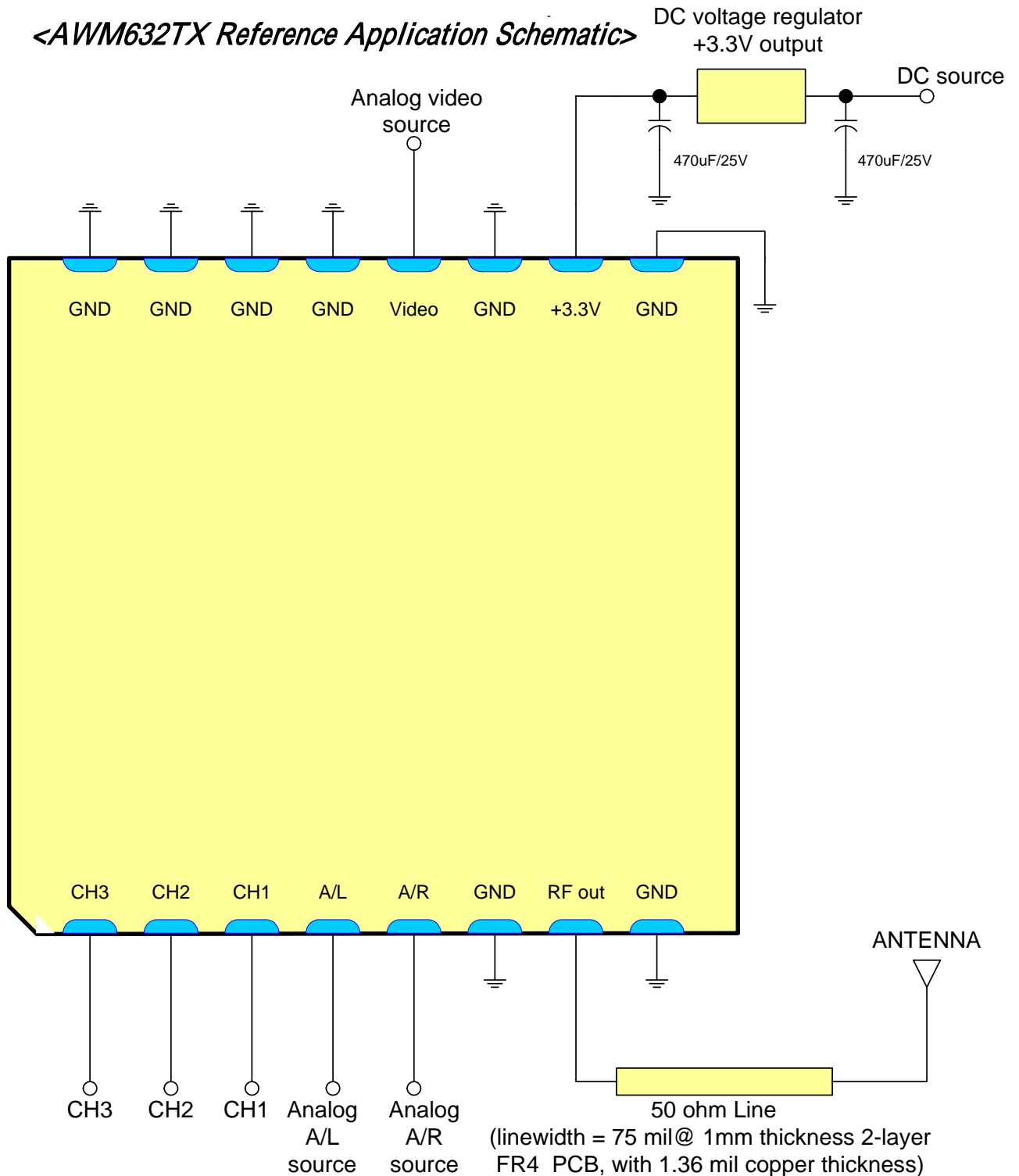
Pin	Function	Pin	Function
1	GND	9	GND
2	RF out	10	GND
3	GND	11	GND
4	Audio/R in	12	GND
5	Audio/L in	13	Video in
6	CH1	14	GND
7	CH2	15	DC +3.3V
8	CH3	16	GND

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### Test and Application Information

#### <AWM632TX Reference Application Schematic>



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### A、 RF Output Port

Please connect a 2.4GHz antenna to pin2 of TX module or layout a 50 ohm transmission line on a baseband between antenna and module.

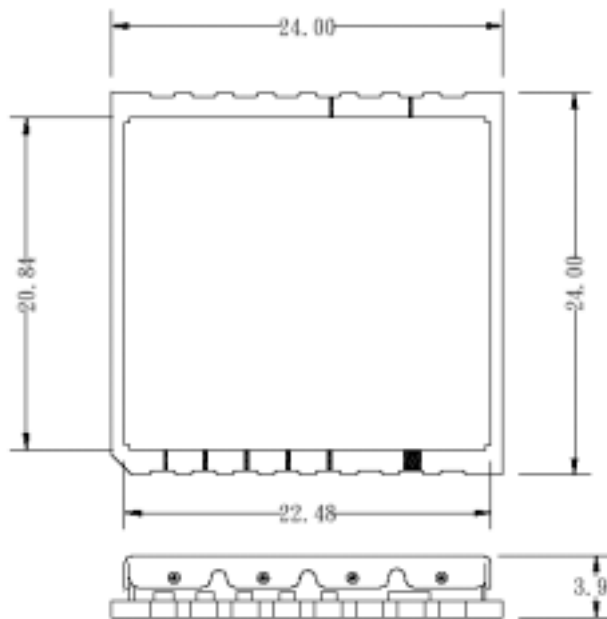
### B、 Channel Select

It's used a DIP switch or a slide switch with 4 throws in order to connect each channel pin of TX module to ground. The default locked channel is CH4 when all switches are pulled open.

Selecting CH1 by turning on the switch of CH1 to connect the corresponding pin of TX module to ground, and then TX module will be locked to CH1. CH2, CH3, and CH4 are selected at the same way. Furthermore, please refer to the application note if the toggle switch design is required.

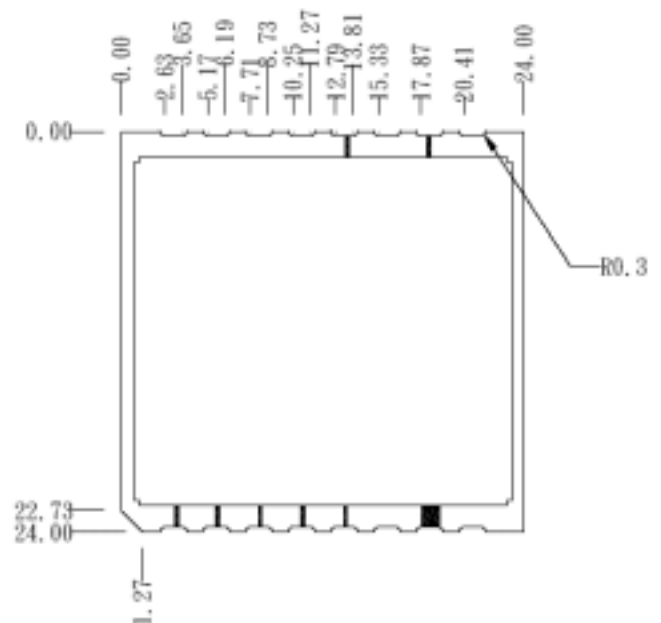
### Dimension

#### AWM632 TX (一)



Unit: mm Tolerance: (+0.3/-0.3)

#### AWM632 TX (二)



Unit: mm Tolerance: (+0.3/-0.3)

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