



## 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 can transmit/receive a wide band audio & video signals up to 300 feet in open area.

## Features

- Worldwide 2.4GHz ISM band
- 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
- Channel selection is four channel and default value is ch4 (not enable). Other channel can be selected by pulling low to enable.

## TECHNICAL SPECIFICATION

### General

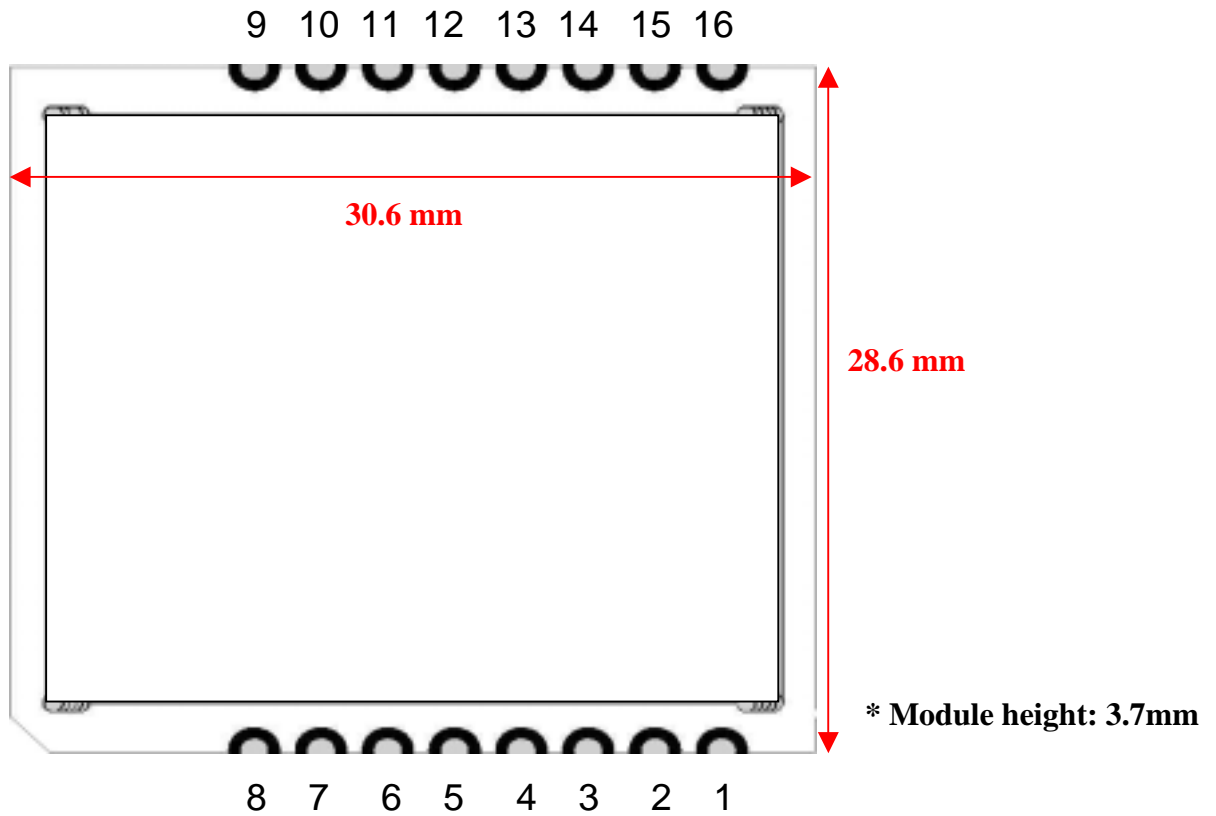
|  |   |
|--|---|
| Operation Frequency Range                | 2400 ~ 2483MHz  |
| Channel Selection                        | PLL Synthesizer, 4CH.                                     |
| Channel Frequency                        | Ch1: 2414MHz, CH2: 2432MHz,<br>CH3: 2450MHz, CH4: 2468MHz |
| Video-Audio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

### Transmitter

|                                   |                          |
|-----------------------------------|--------------------------|
| Supply Voltage                    | DC + 5V ( ± 2% )         |
| Supply Current                    | 140 ~ 180mA, typ.        |
| Output Power                      | > 16dBm                  |
| 2.4GHz Carrier Frequency Accuracy | ±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

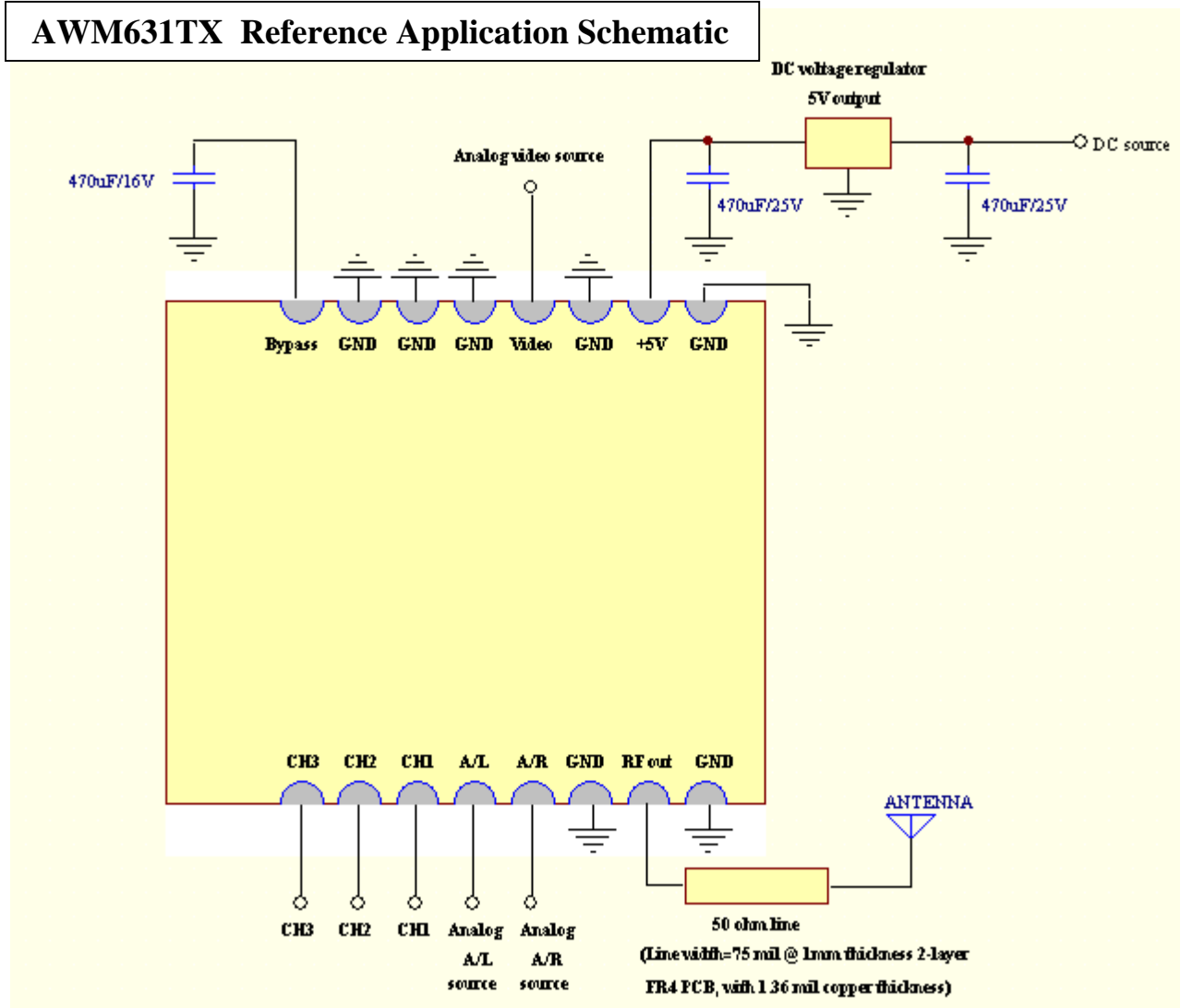


**(NOTE: Channel selection default value is ch 4)**

| Pin | Function   | Pin | Function |
|-----|------------|-----|----------|
| 1   | GND        | 9   | Bypass   |
| 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 +5V   |
| 8   | CH3        | 16  | GND      |

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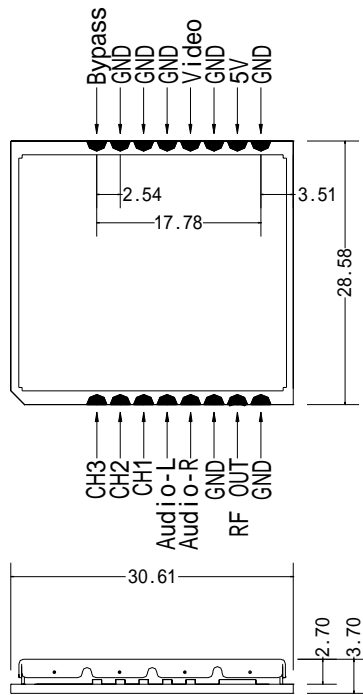
### Application Schematic



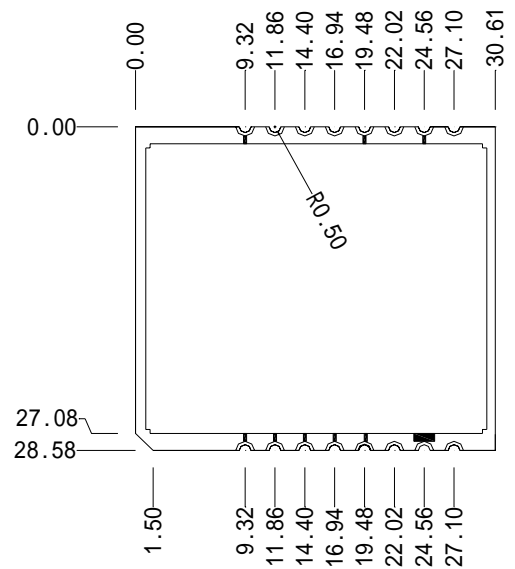
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### Dimension

AWM631-TX(一)



AWM631-TX(二)



Unit:mm Tolerance:±0.15

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