



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

## Features

- Worldwide 2.4GHz ISM band
- Conform with R&TTE & FCC 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

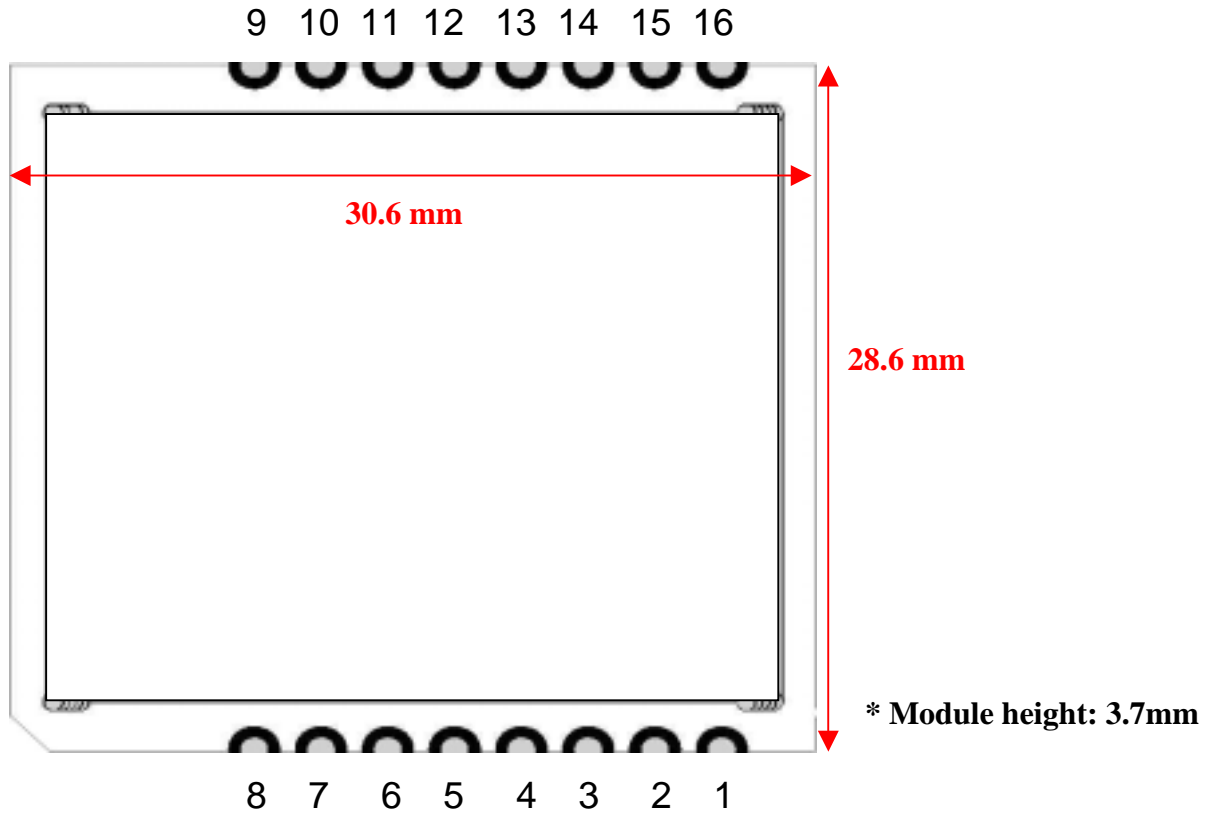
Operation Frequency Range	2400 ~ 2483MHz
Channel Selection	PLL Synthesizer, 4CH.
Channel Frequency	Ch1: 2414MHz, CH2: 2432MHz, CH3: 2450MHz, CH4: 2468MHz
Video-Audio Modulation/Demodulation Type	FM-FM
Operating Ambient Temperature	-10 ~ 60

### Transmitter

Supply Voltage	DC + 5V ( ± 2% )
Supply Current	55mA, typ.
Output Power	10dBm ± 1dBm ( CE ) 0dBm ± 1dBm ( FCC )
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.

## AIRWAVE TECHNOLOGIES INC.

### Pad Description

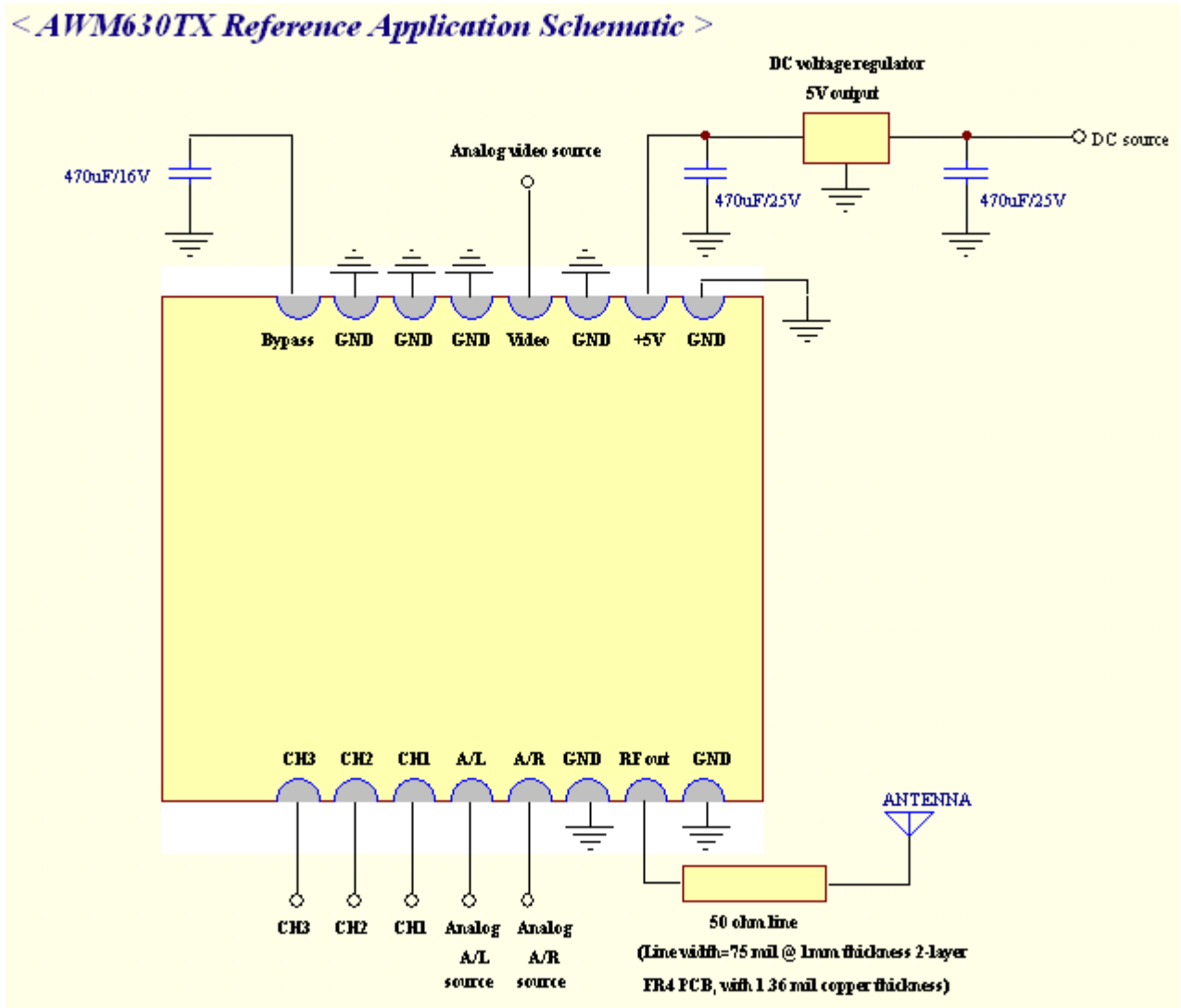


Pin	Function	Pin	Function
1	GND	9	Bypass
2	RF out	10	GND
3	GND	11	GND
4	Audio/R in	12	GND
5	Audio/L in	13	Video in
6	CH1	14	GND
7	CH2	15	DC +5V
8	CH3	16	GND

REMARKS: CH4 is DEFAULT.

### AIRWAVE TECHNOLOGIES INC.

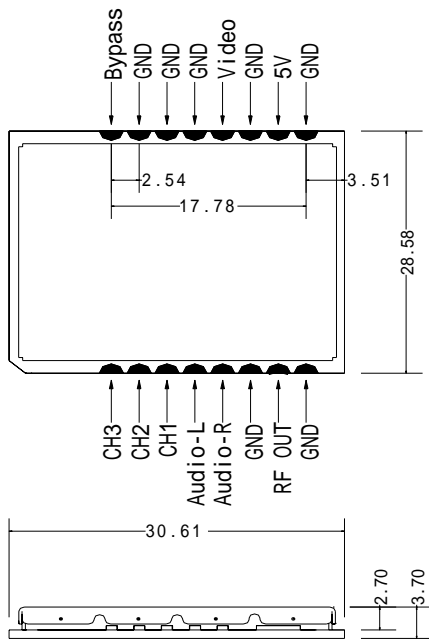
### Application Schematic



### AIRWAVE TECHNOLOGIES INC.

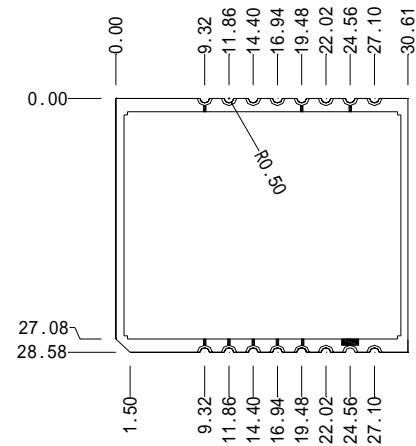
### Dimension

#### AWM630-TX(一)



Unit:mm Tolerance:± 0.15

#### AWM630-TX(二)



Unit:mm Tolerance:± 0.15

### AIRWAVE TECHNOLOGIES INC.

**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 FCC and R&TTE which can transmit/receive a wide band audio & video signals up to 300 feet in open area.

**Features**

- Worldwide 2.4GHz ISM band
- Conform with R&TTE & FCC 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 baseband PCB
- No external Audio circuit needed

**TECHNICAL SPECIFICATION****General**

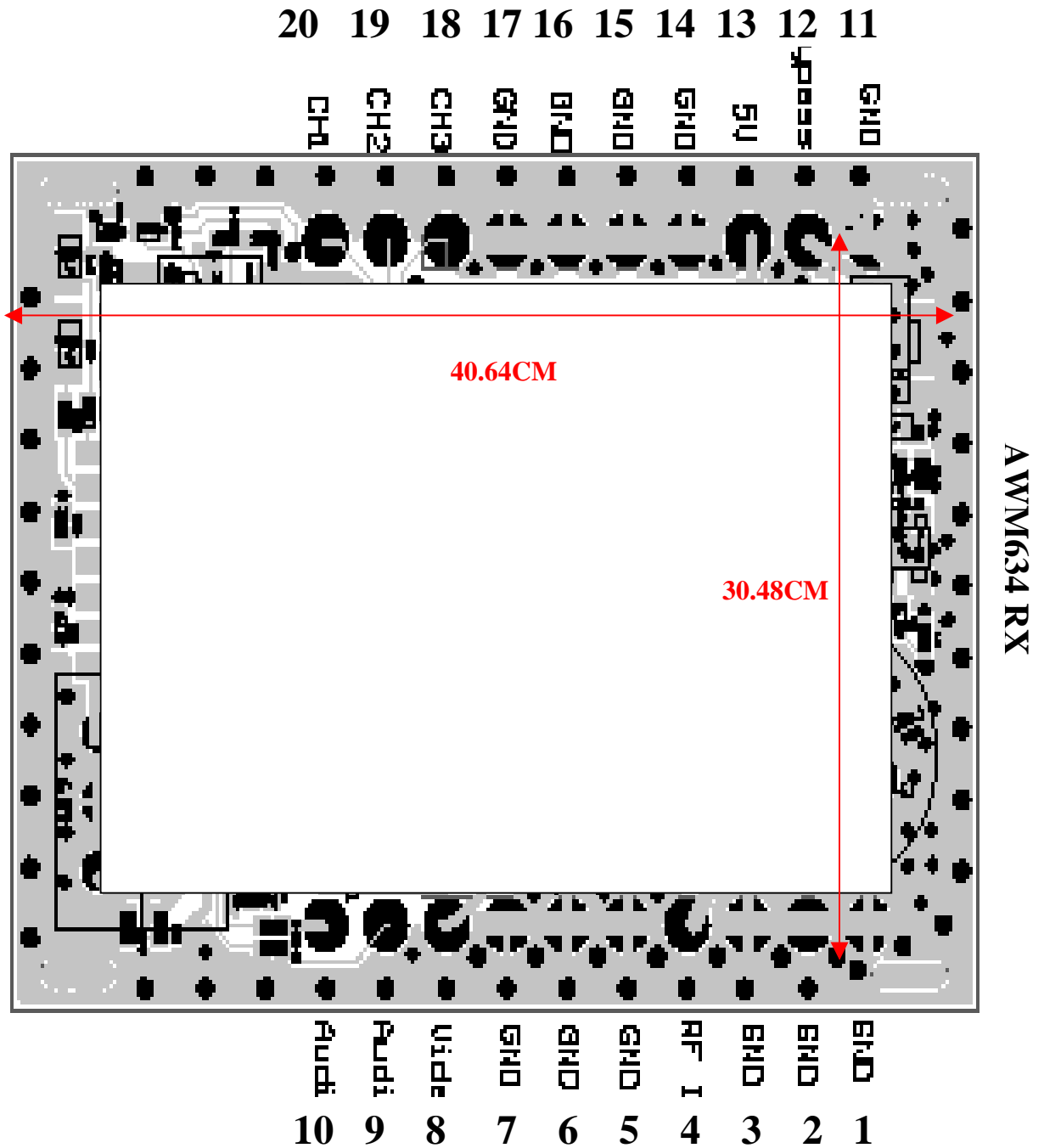
Operation Frequency Range	2400 ~ 2483MHz
Channel Selection	PLL Synthesizer, 4ch. <sup>(1)</sup> (2414,2432,2450,2468MHz)
Video-Audio Modulation/Demodulation Type	FM-FM
Supply Voltage	DC + 5V (+/-2%)
Supply Current	140mA ~ 180mA
Operating Ambient Temperature	-10 ° C ~ +60 ° C

**Receiver**

Input Signal Level Range	-85~-10dBm
<b>Video</b>	
Output Signal Level	1V <sub>P-P</sub> , typ. (+/-0.2Volt)
Frequency Response	+/-5 dB, max. 50Hz~5.5MHz
S/N Ratio (100KHz, 1V <sub>P-P</sub> Sine Wave)	40dB, min.
<b>Audio</b>	
Output Frequency Range	50Hz ~ 20KHz
Output Signal Level (Modulation Signal : 50Hz~15KHz Sine Wave)	3V <sub>P-P</sub> , typ. (+/-0.3Volt)
Audio Frequency Response	50Hz ~ 15kHz (-3dB Bandwidth )
S/N Ratio (50Hz ~ 15KHz)	50dB, typ. (+/-3dB)

**AIRWAVE TECHNOLOGIES INC.**

### DIMENSIONS & Pin Definition Description



**AIRWAVE TECHNOLOGIES INC.**



# AWM630TX/634RX

## 2.4GHz Video/Audio RF Module

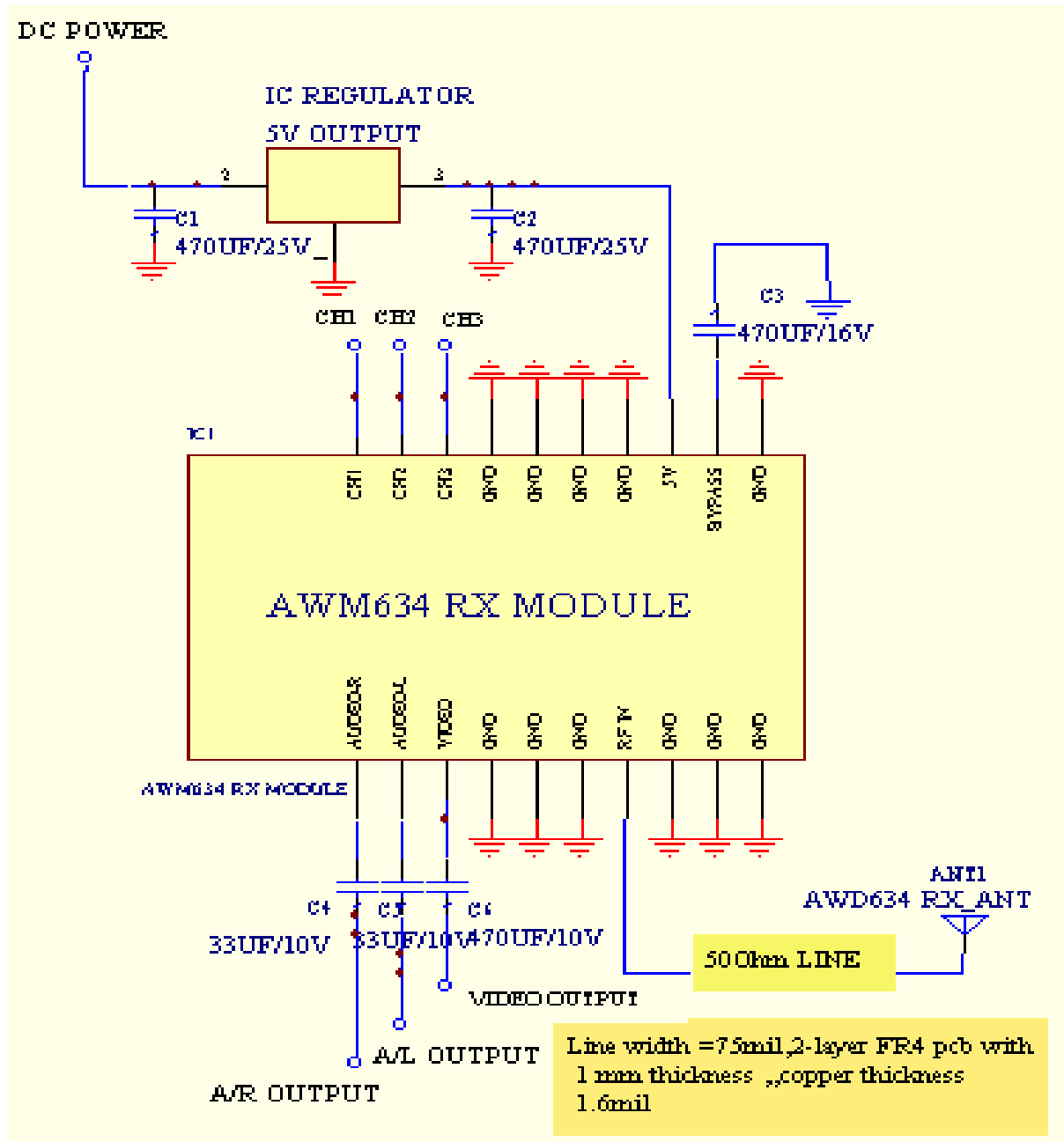
7/10

PIN	Function	PIN	Function
1	GND	11	GND
2	GND	12	BYPASS
3	GND	13	5V
4	RF IN	14	GND
5	GND	15	GND
6	GND	16	GND
7	GND	17	GND
8	VIDEO	18	CH3
9	AUDIO-L	19	CH2
10	AUDIO-R	20	CH1

REMARKS: CH4 is DEFAULT.

### AIRWAVE TECHNOLOGIES INC.

### AWM634RX Module Application Circuit

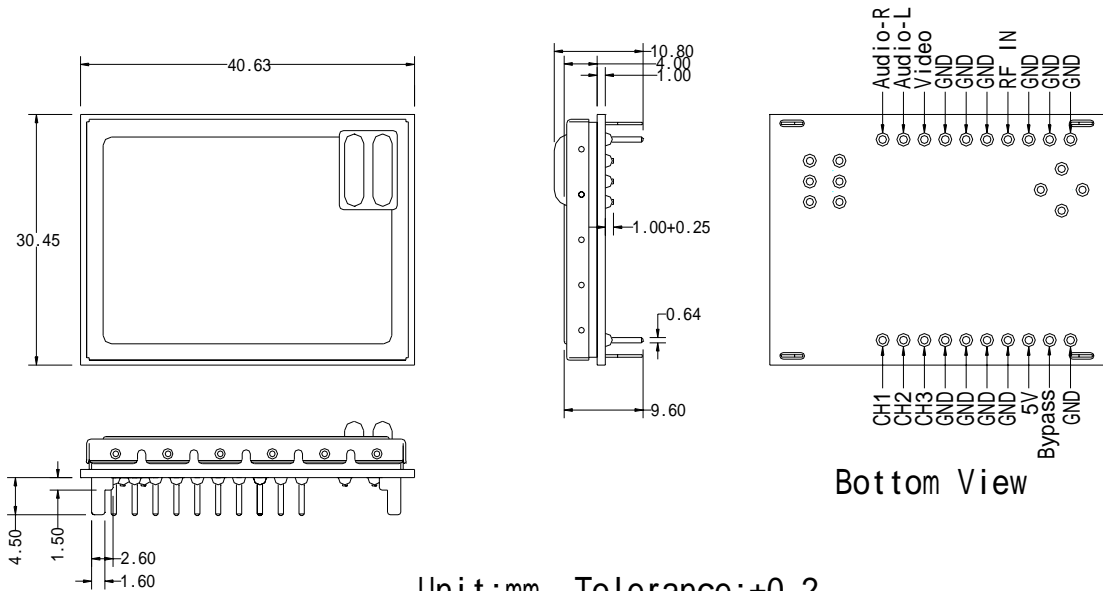


#### AIRWAVE TECHNOLOGIES INC.



\* Module height:

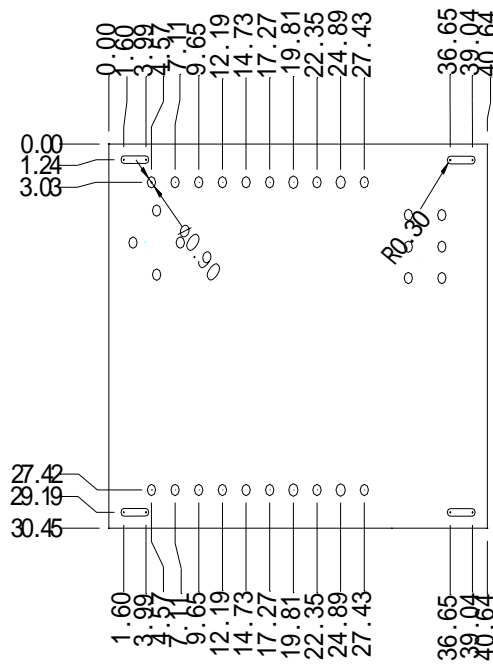
### AWM634-RX(2-1)



Unit:mm Tolerance:±0.2

### AIRWAVE TECHNOLOGIES INC.

### AWM634-RX(2-2)



Top View

Unit:mm Tolerance:±0.2

#### AIRWAVE TECHNOLOGIES INC.