



AWM680RX

5.8GHz Video/Audio RF Module

Description

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 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

- Use worldwide 5.8GHz ISM band
- Conform with R&TTE & FCC stipulation
- 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

TECHNICAL SPECIFICATION

General

Operation Frequency Range	5725 ~ 5875MHz
Channel Selection	PLL Synthesizer, 7ch. Ch1: 5740MHz, CH2: 5760MHz, CH3: 5780MHz, CH4: 5800MHz, CH5: 5820MHz, CH6: 5840MHz, CH7: 5860MHz
Video-Audio Modulation/Demodulation Type	FM-FM
Supply Voltage	DC + 5V (+/-2%)
Supply Current	210 mA , typ.
Operating Ambient Temperature	0° C~+50° C

Receiver

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Input Signal Level Range	-85~-10dBm
Video	
Output Signal Level	1V _{P-P} , typ. (+/-0.2Volt)
Frequency Response	+/-5 dB, max. 50Hz~5.5MHz
S/N Ratio (100KHz, 1V _{P-P} Sine Wave)	40dB, min.
Audio	
Output Frequency Range	50Hz ~ 20KHz
Output Signal Level (Modulation Signal : 50Hz~15KHz Sine Wave)	3V _{P-P} , typ. (+/-0.3Volt)
Audio Frequency Response	50Hz ~ 15kHz (-3dB Bandwidth)
S/N Ratio (50Hz ~ 15KHz)	50dB, typ. (+/-3dB)
RSSI	
RSSI Output Voltage(RF Input -10~-85dBm)	0.2 ~ 1.5V

PIN DESCRIPTIONS

1	GND	
2	RSSI	Received Signal Strength Indicator
3	A-R	Audio_Right CH Output
4	A_L	Audio_Left CH Output
5	VIDEO	Video Output
6	DC5V	DC 5 Volt In
7	BYPASS	Connect to external 1000uF bypass capacitor
8	SW	Connect to tack external switch for CH selection
9	BIT2	see note
10	BIT1	
11	BIT0	
12	GND	

AIRWAVE TECHNOLOGIES INC.

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

All Specification are subject to change without notice.

Rev : 2.1



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Note :

BIT2	BIT1	BIT0		
0	0	0	CH1	5740MHz
0	0	1	CH2	5760MHz
0	1	0	CH3	5780MHz
0	1	1	CH4	5800MHz
1	0	0	CH5	5820MHz
1	0	1	CH6	5840MHz
1	1	0	CH7	5860MHz

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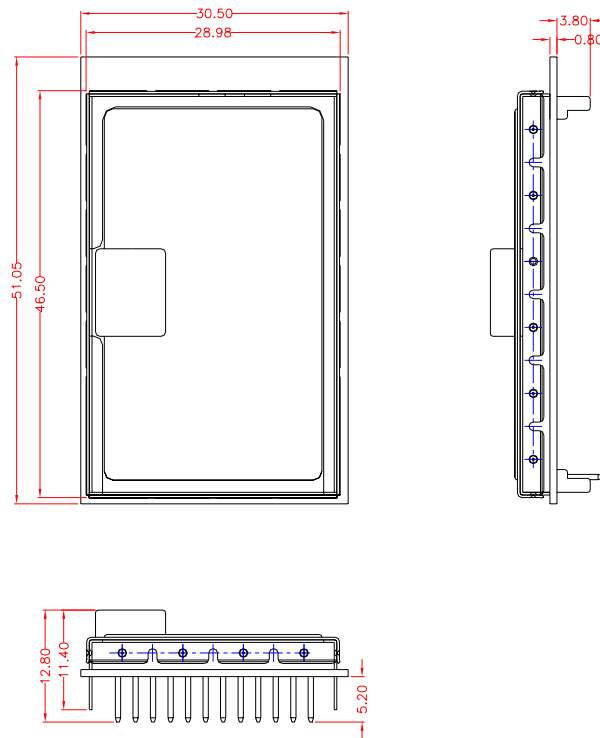
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MODULE DIMENSION



Unit:mm Tolerance:±0.25

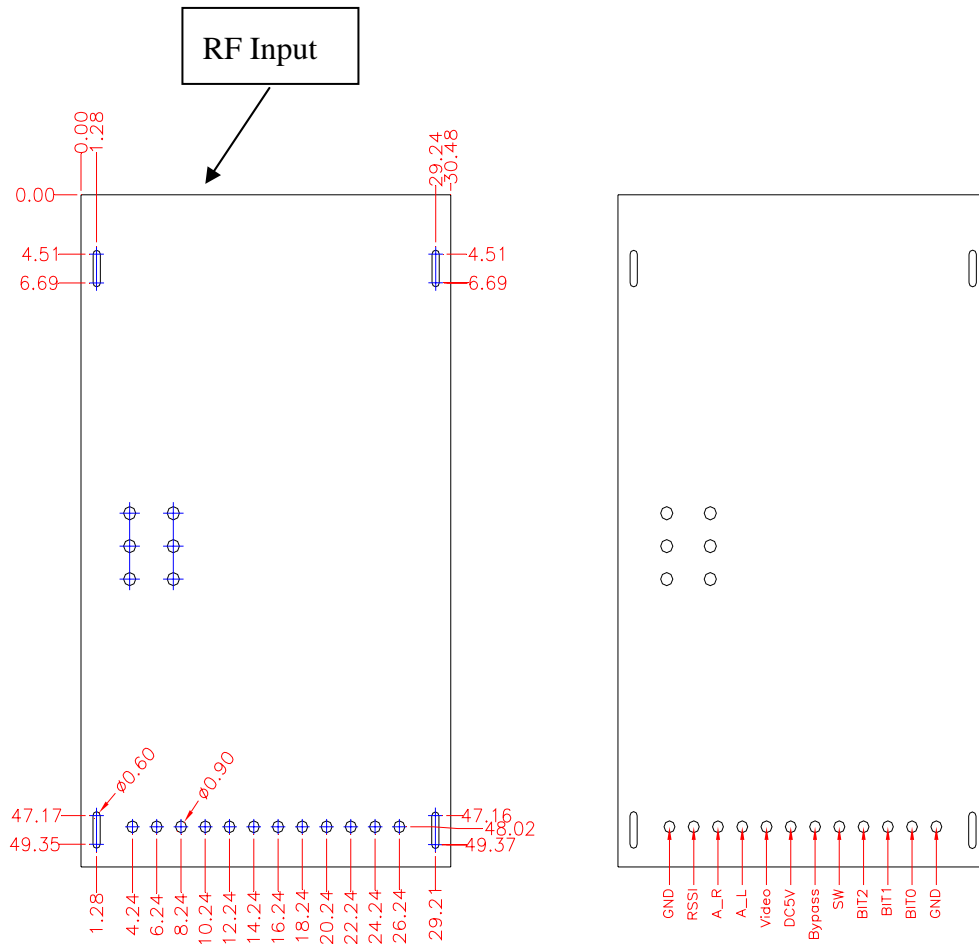
PCB LAYOUT

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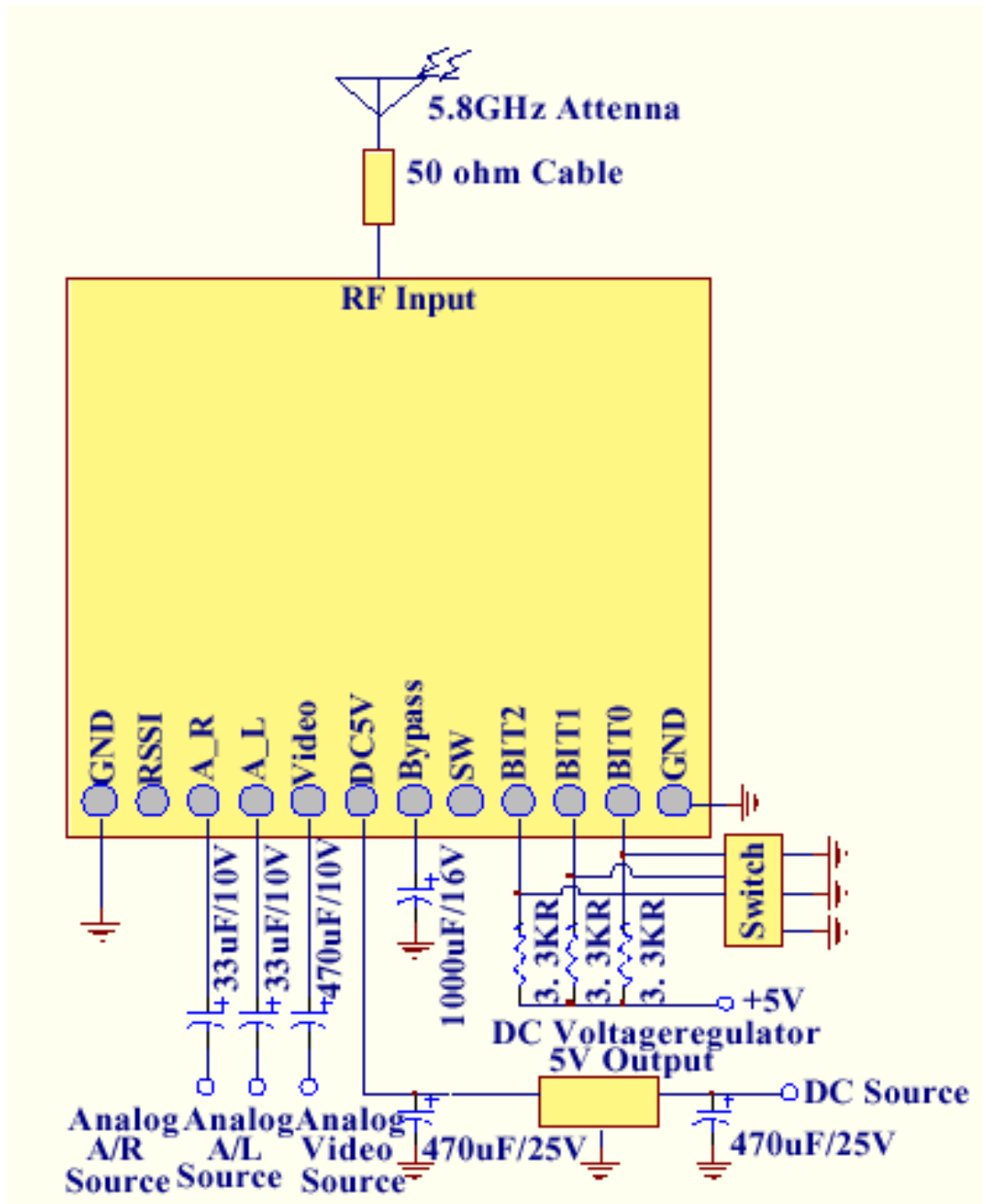
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AWM680RX Module Application Circuit

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