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AIRWAVE

AWM680RX

5.8GHz Audio/Video RX Module

Description

The Airwave AWM680RX Audio/Video wireless receiver module uses the popular 5.8GHz ISM band. It is compatible with the Airwave AWM680TX and AWM681TX A/V transmitter modules.

Features

- Worldwide 5.8GHz ISM band
- Conforms with R&TTE & FCC stipulation
- Compact size and low power consumption
- Highly efficient FM-FM modulation/demodulation scheme
- Compatible with both NTSC and PAL composite video formats
- Fully integrated Audio/Video module (minimum external components required)
- Two-channel Stereo Audio
- Seven selectable RF channels

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

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Receiver

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

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	

PIN DESCRIPTIONS

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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

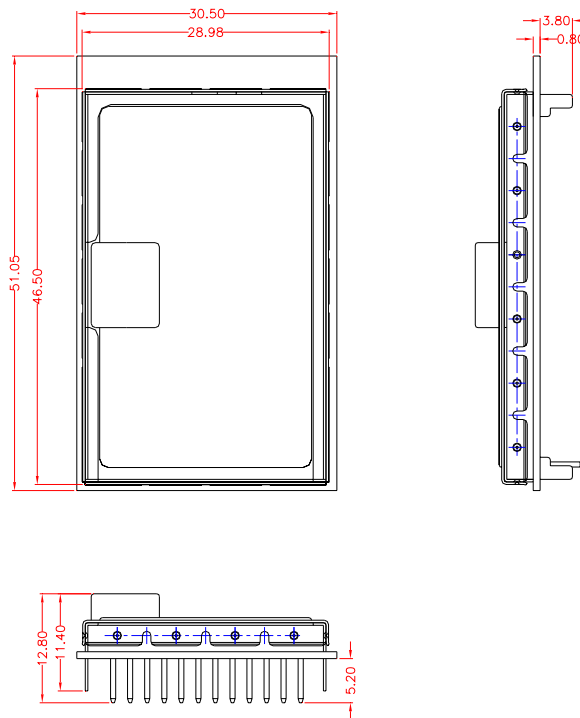
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MODULE DIMENSION



Unit:mm Tolerance:±0.25

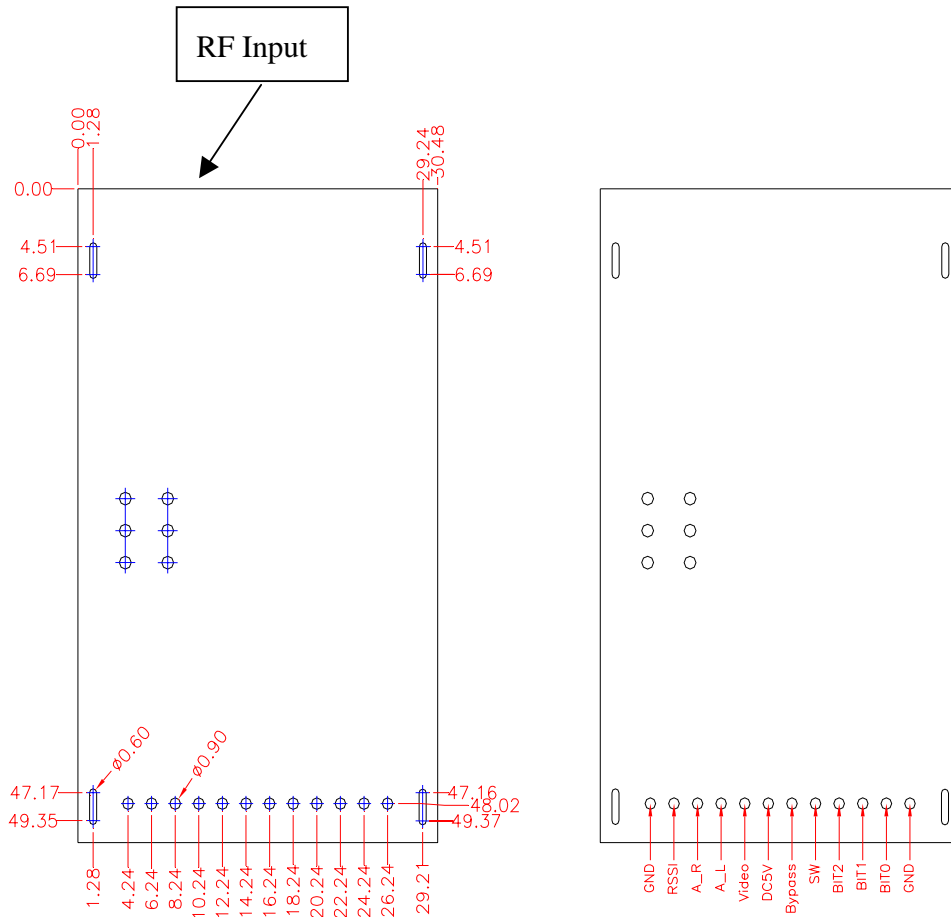
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PCB LAYOUT



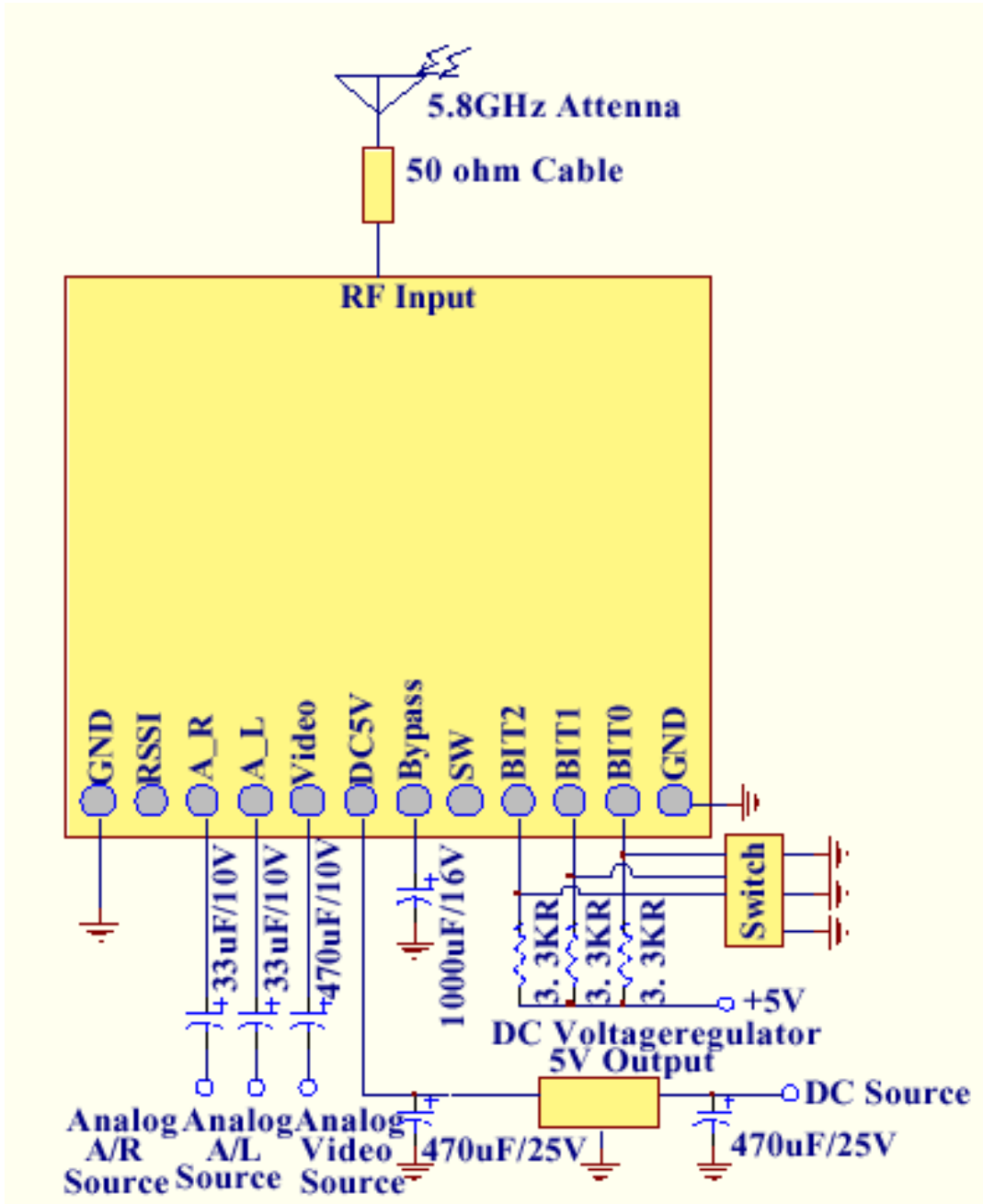
Unit:mm Tolerance:±0.25

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AWM680RX Module Application Circuit

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