

FOR	Company	
	ATTN	

保密宣告
(Classified Info.)

本文列為機密文件，受雙方 NDA(Non-Disclose Agreement)所規範。
 基此，請妥善保管文件，不可外洩給與合約無關之第三者造成雙方之損失。
 The information contained herein is the exclusive property of Airwave Technologies Inc. and shall not be distributed, reproduced, or disclosed in whole or in part without prior written permission of Airwave Technologies Inc.

DATA SHEET



AWM660 RX

5.8 GHz Wideband FM Receiver

承認	承認	品保	工程
Dr. T.H. Chen	Ben Huang	Sandy Chen	Shih Chuan Lin
Approve	Approve	QA	E/E



AIRWAVE TECHNOLOGIES INC.

Contents

1. Descriptions	4
2. Feature	4
3. Application	4
4. Function block	5
5. Pin define	5
6. Pin descriptions	6
7. Absolute maximum ratings	6
8. DC/AC Electrical characteristic	7
9. Reference circuit	8
10. Dimension	9

1. Descriptions:

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. AWM660 RX module uses down conversion concept to convert the 5.8GHz RF Signal to 480 MHz IF signal, and then obtain base band via PLL FM demodulation IC by Airwave AWI5822.

2. Feature:

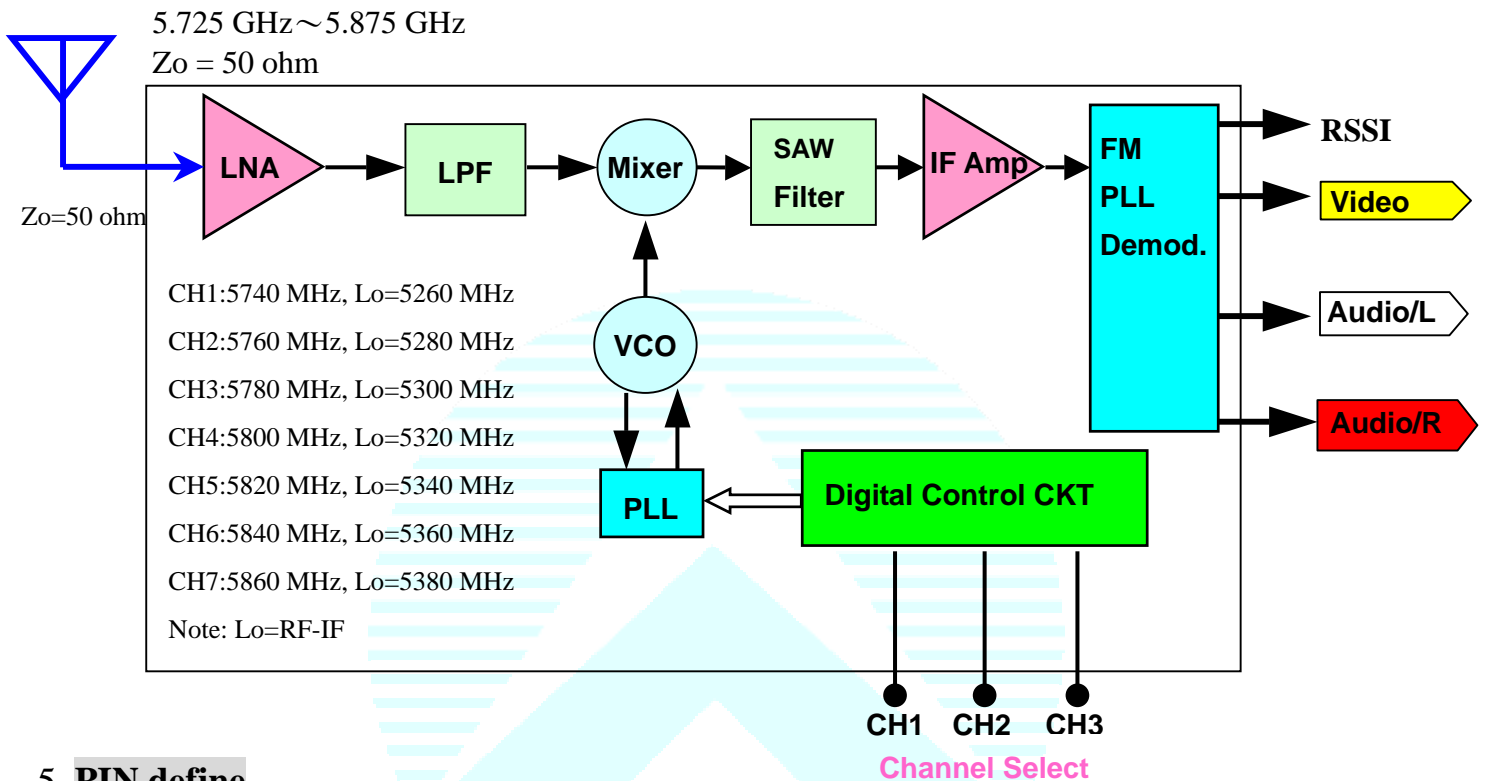
- Worldwide 5.8GHz ISM band (5725 MHz~5875 MHz).
- Conform to R&TTE & FCC stipulation.
- Compatible with both NTSC and PAL video formats.
- Compact size and low power consumption.
- Highly efficient FM-FM modulation/demodulation scheme.
- Integrating Audio/Video input and output into one module base band PCB.
- Provide with 7 selectable channels.
- Received signal strength indicator (RSSI).

3. Application:

- AV Sender
- Baby Monitor
- Surveillance
- Wireless Camera

AIRWAVE TECHNOLOGIES INC.

4. Function block:



5. PIN define

AWM660RX 外觀實體圖:

Pin 01	VCC
Pin 02	Bypass
Pin 03	GND
Pin 04	Audio_R
Pin 05	Audio_L
Pin 06	Video
Pin 07	B2
Pin 08	B1
Pin 09	B0



GND	Pin 10
RF IN	Pin 11
GND	Pin 12

AIRWAVE TECHNOLOGIES INC.

6. PIN descriptions:

PIN	NAME	Descriptions
01	VCC	DC +5V power supply in).
02	BYPASS	Bypass capacitor.
03	GND	Ground.
04	Audio_R	Right sound signal output.
05	Audio_L	Left sound signal output.
06	Video	Video signal output.
07	B2	Channel select.
08	B1	Channel select.
09	B0	Channel select.
10	GND	Ground.
11	RF IN	RF received signal input
12	GND	Ground

Channel selection are seven channels by Pin20, Pin19 and Pin 18 for dip sw mode As shown below :

Table1:

Pin07	Pin08	Pin09	Descriptions	Receiver Frequency
B2	B1	B0		
0	0	0	Pin 07, Pin 08, Pin 09 connect to GND.	5740MHz (CH1)
0	0	1	Pin 07 and Pin 08 connect to GND, Pin 09 OPEN.	5760MHz (CH2)
0	1	0	Pin 07 and Pin 09 connect to GND, Pin 08 OPEN.	5780MHz (CH3)
0	1	1	Pin 07 connect to GND, Pin 08 and Pin 09 OPEN.	5800MHz (CH4)
1	0	0	Pin 08 and Pin 09 connect to GND, Pin 07 OPEN.	5820MHz (CH5)
1	0	1	Pin 08 connect to GND, Pin 07 and Pin 09 OPEN.	5840MHz (CH6)
1	1	0	Pin 09 connect to GND, Pin 07 and Pin 08 OPEN.	5860MHz (CH7)

AIRWAVE TECHNOLOGIES INC.

7. Absolute maximum ratings:

RF/ DC Parameters	Min.	Typ.	Max.	Unit
Storage Temperature Range	-25	-	85	°C
Supply voltage	4.5	-	5.5	V

The maximum rating must not be exceeded at any time. Do not operate the device under conditions outside the above.

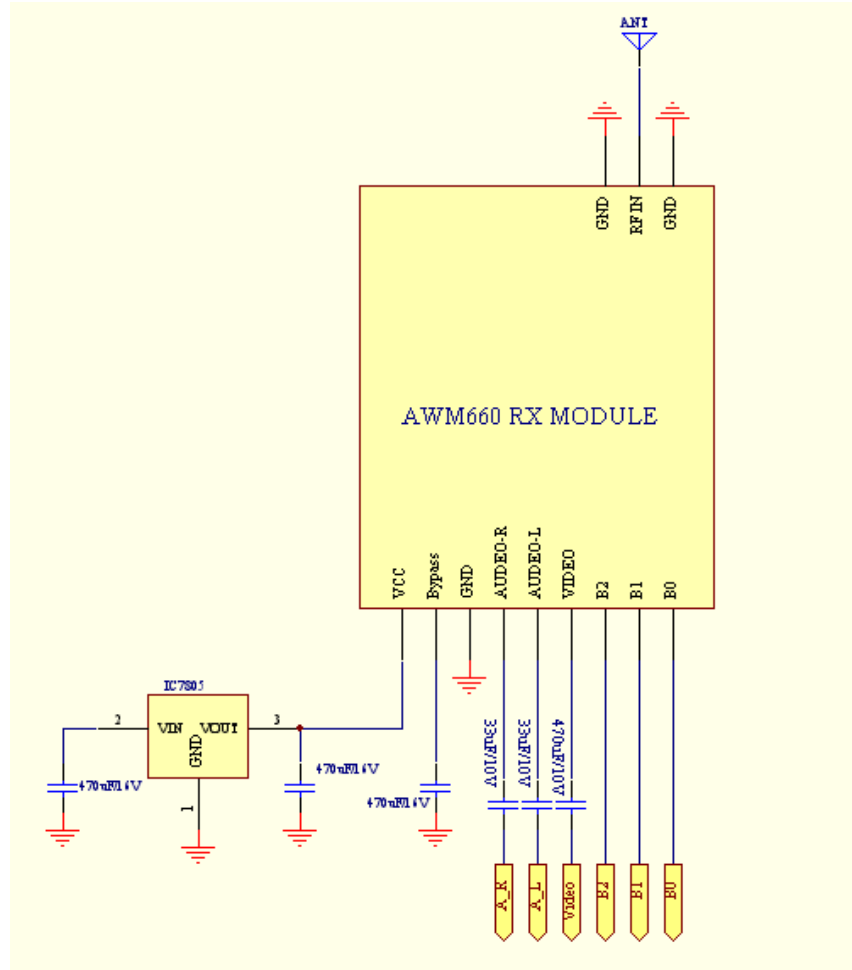
8. DC/AC Electrical characteristic:

(VCC=DC +5V, 25°C)

RF/ DC Parameters	Min.	Typ.	Max.	Unit
Supply voltage	4.95	5	5.05	V
Supply current		210		mA
RF Input Level	-85		-10	dBm
Operating temperature	-10	-	60	°C
Operation Frequency Range	5725		5875	MHz
Channel Selection	PLL Synthesizer, 7CH (See Tab1)			
Channel Frequency	CH1 : 5740 MHz, CH2 : 5760 MHz CH3 : 5780 MHz, CH4 : 5800 MHz CH5 : 5820 MHz, CH6 : 5840 MHz CH7 : 5820 MHz.			
Video-Audio Modulation/Demodulation Type	FM-FM			
Video				
Output Signal Level	1V _{P-P} , typ. (+/-0.2V)			
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 : 1kHz Sine Wave)	2V _{p-p}			

AIRWAVE TECHNOLOGIES INC.

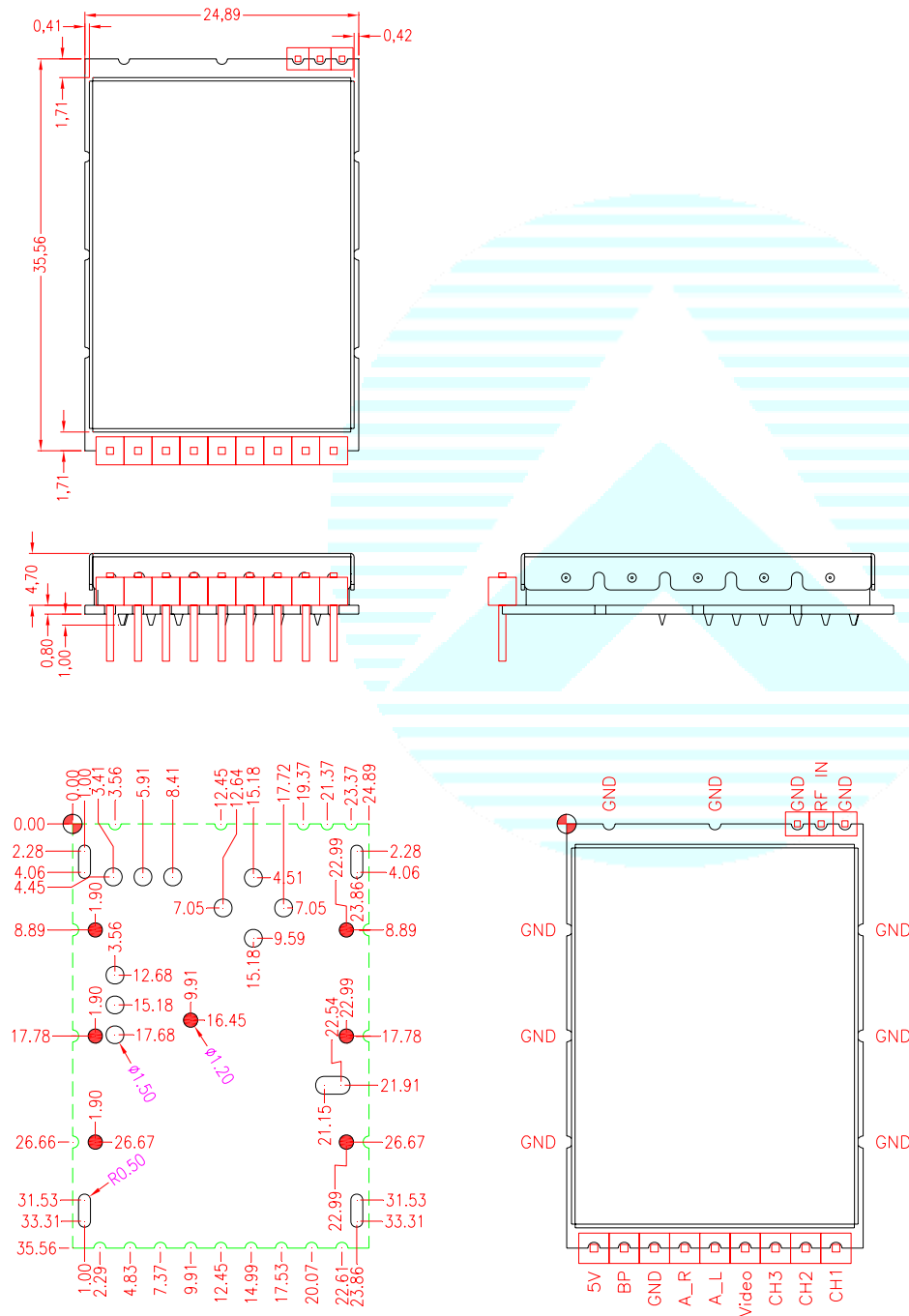
9. Test circuit:



AIRWAVE TECHNOLOGIES INC.

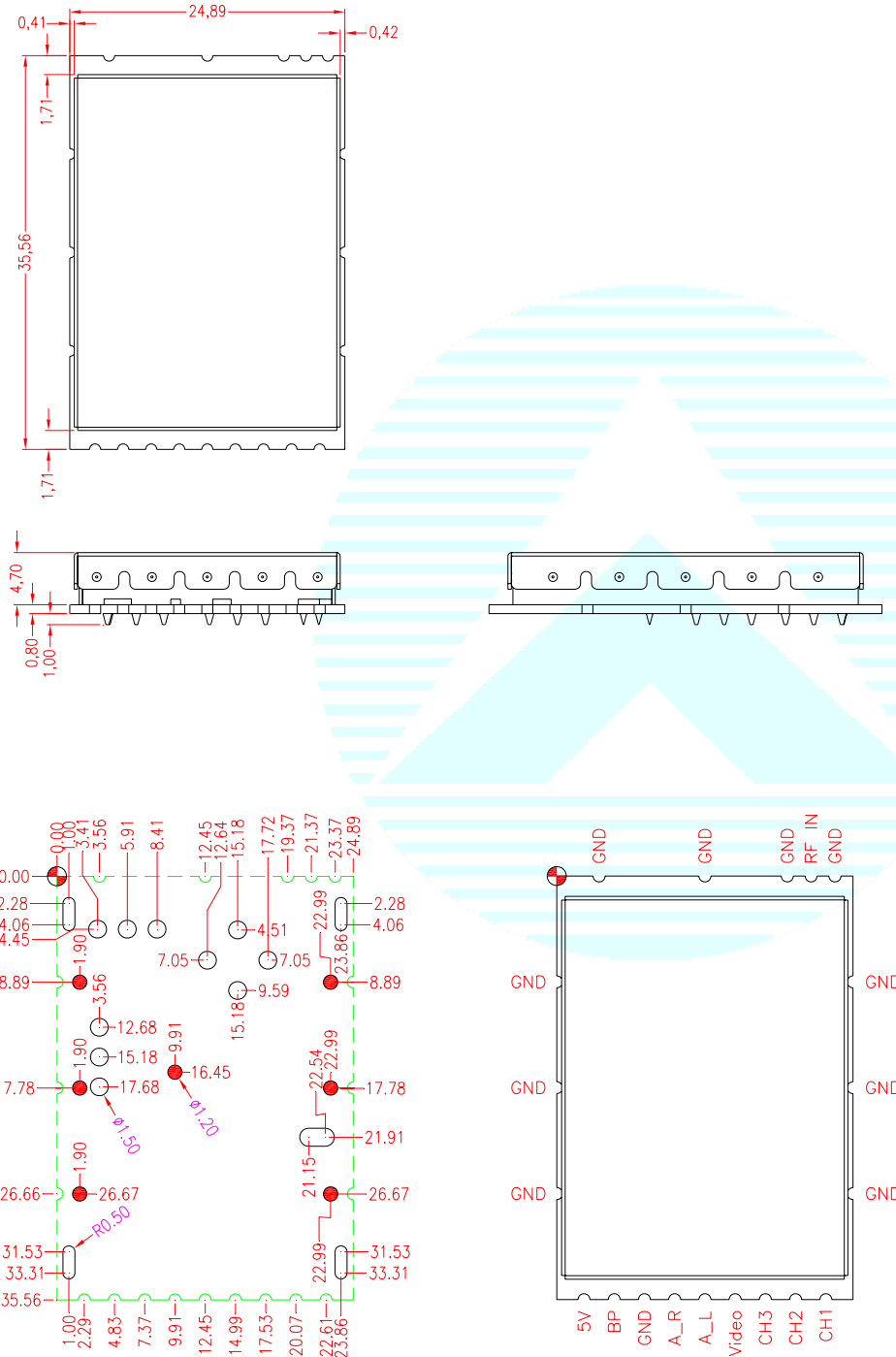
10. Dimension:

(1) with Pins



AIRWAVE TECHNOLOGIES INC.

(2) without Pins



AIRWAVE TECHNOLOGIES INC.