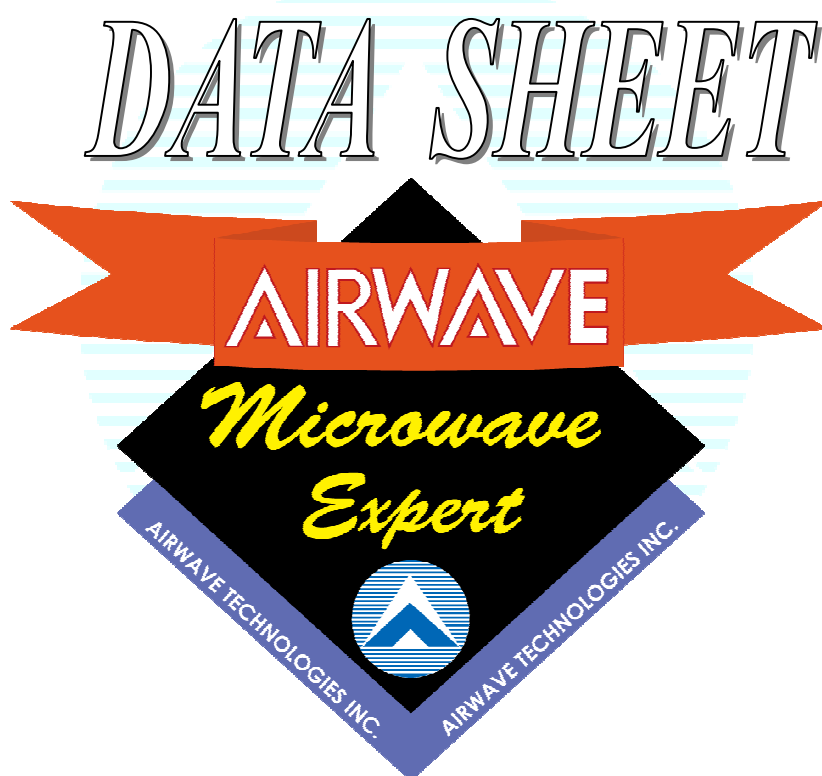


FOR	Company	
	ATTN	

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.



AWM6W2V_RX

5.8 GHz AHD Wideband FM Receiver

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



AIRWAVE TECHNOLOGIES INC.

[illegible]

Contents

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

AIRWAVE TECHNOLOGIES INC.

1. Descriptions:

Airwave 5.8GHz AHD wideband wireless RF modules contain one Transmitter and one Receiver. Using of the most popular 5.8GHz ISM band and being designed with high reliability, Airwave RF modules, AWM6W2V_RX and AWM6W1V_TX, can transmit/receive a wideband AHD video signal up to 200M in open area. AWM6W2V_RX module uses Airwave RFIC AWI5822 to down convert 5.8GHz RF Signal to 480 MHz IF signal, and then obtain base band via PLL FM demodulation.

2. Feature:

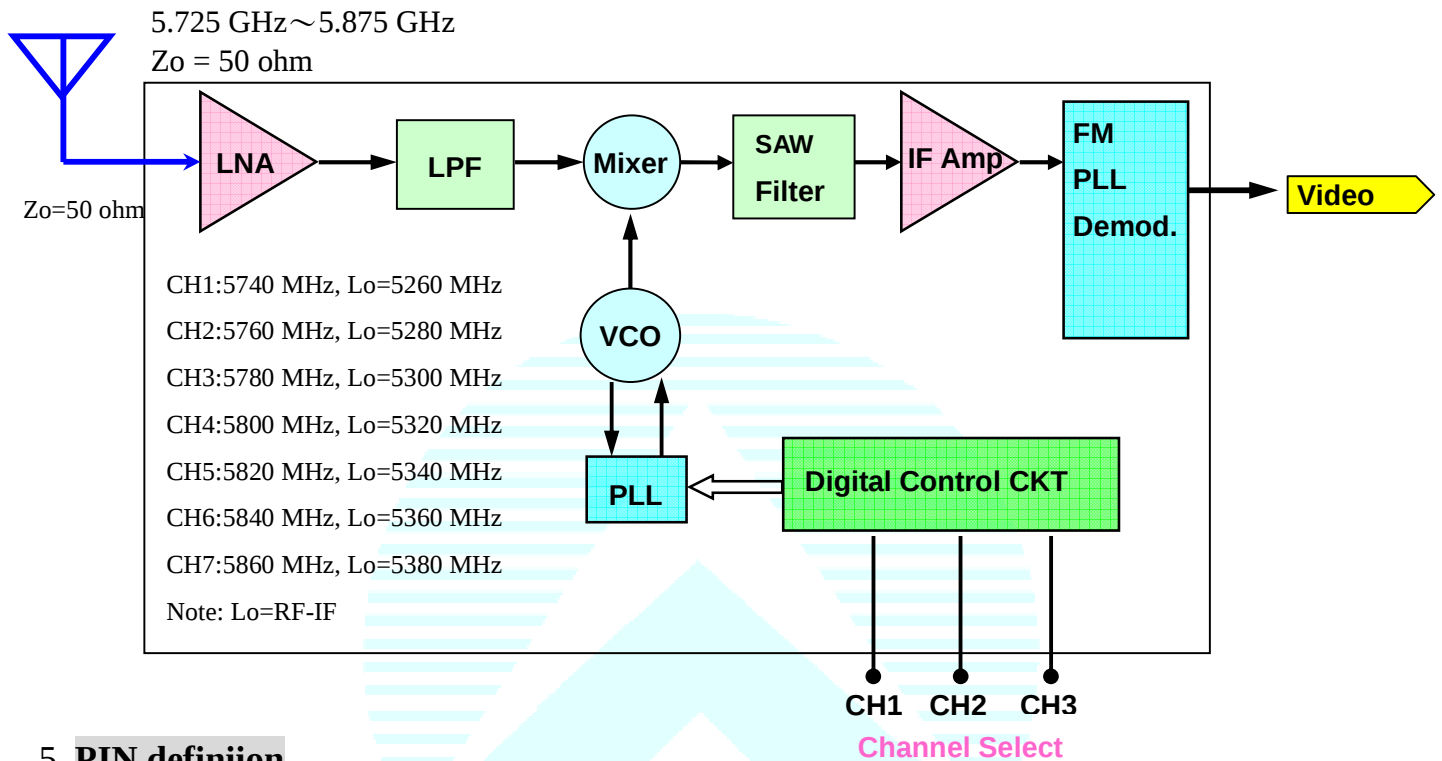
- Worldwide 5.8GHz ISM band (5725 MHz~5875 MHz).
- Compatible with AHD1.0 video formats.
- Compact size and low power consumption.
- Integrated LNA for high receiving sensitivity..
- Highly efficient wideband FM demodulation scheme.
- Integrated video baseband circuitries and output in a single module..
- 7 selectable RF channels.
- DIP or slide switch for channel selection.

3. Application:

- Wireless AHD Sender
- Surveillance
- Wireless Camera

AIRWAVE TECHNOLOGIES INC.

4. Function block:



5. PIN definiion

AWM662RX 外觀實體圖:

Pin 01 VCC
Pin 02 Bypass
Pin 03 GND
Pin 04 NC
Pin 05 NC
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 ¹ .
02	BYPASS	Bypass capacitor.
03	GND	Ground.
04	NC	.
05	NC	.
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 B2	Pin08 B1	Pin09 B0	Descriptions	Receiver Frequency
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)

Channel setting voltage

High voltage	2.5V ~ 3.6V
Low voltage	< 1.0V

Minimum settling time : <50ms

AIRWAVE TECHNOLOGIES INC.

7. Absolute maximum ratings:

RF/ DC Parameters		Min.	Typ.	Max.	Unit
Storage Temperature Range		-25	-	85	℃
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.

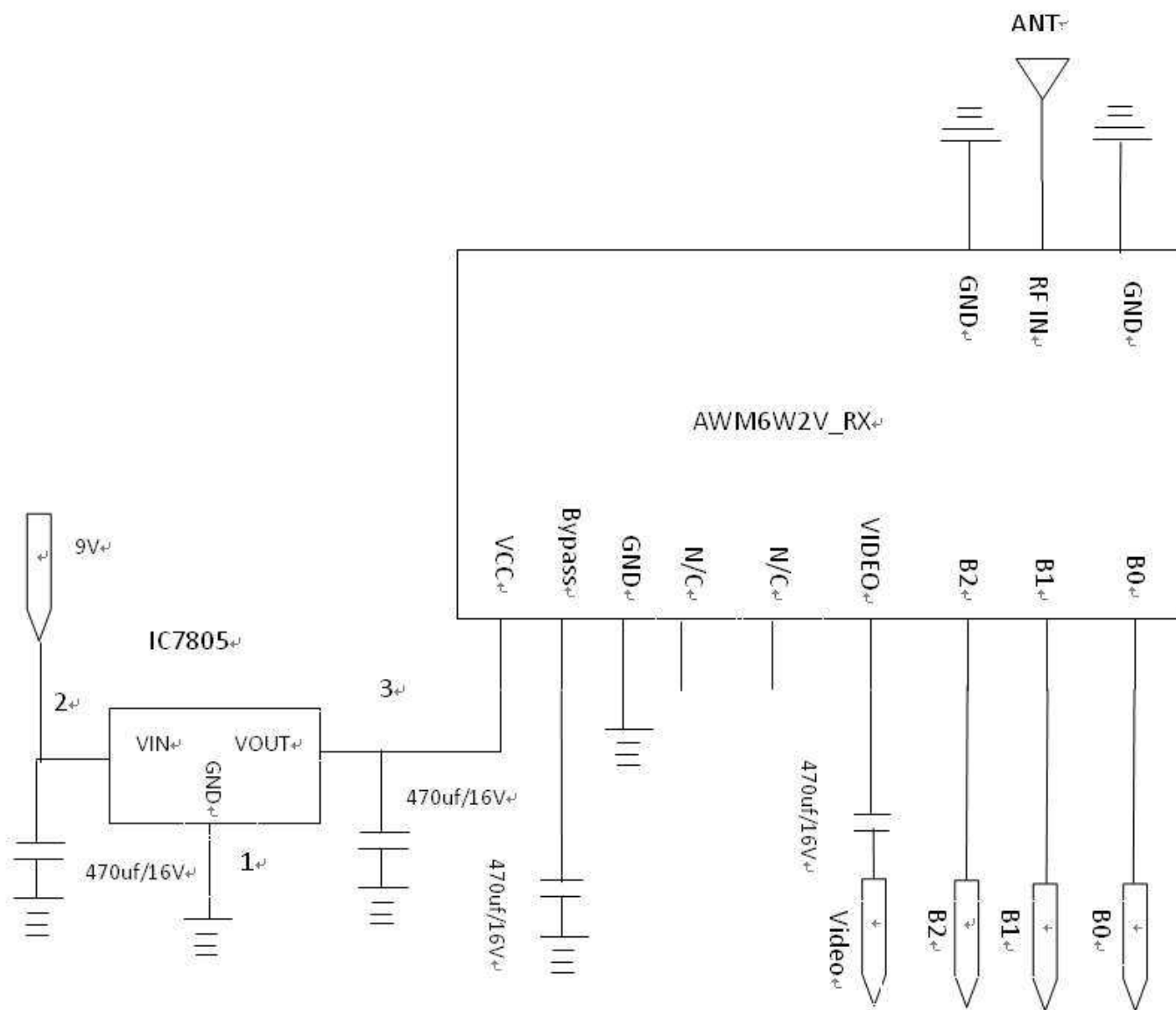
8. DC/AC Electrical characteristic:

(VCC=DC +5V, 25℃)

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	℃
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 : 5860 MHz.			
Video-Audio Modulation/Demodulation Type	FM-FM			
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.			

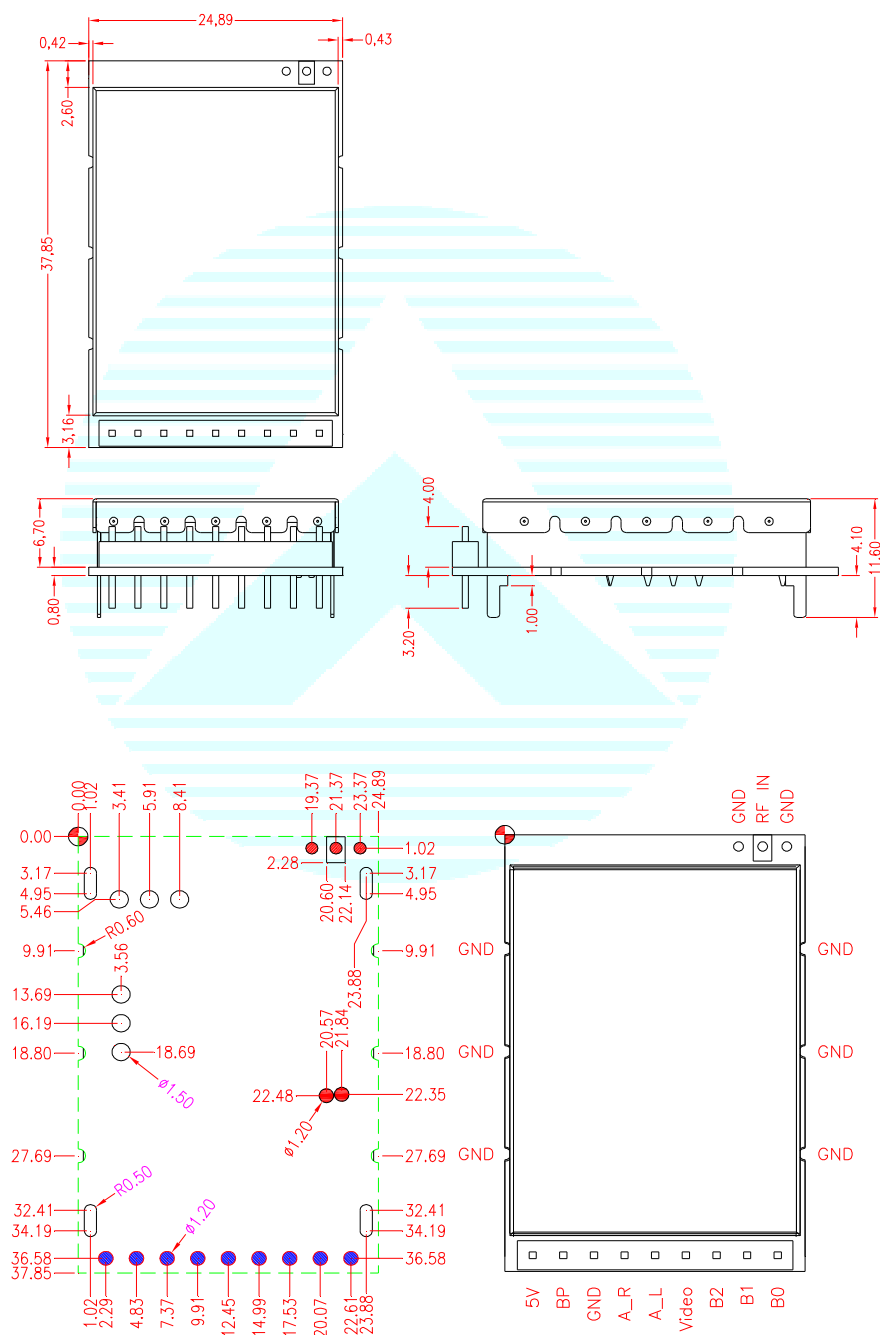
AIRWAVE TECHNOLOGIES INC.

9. Test circuit:



AIRWAVE TECHNOLOGIES INC.

10. Dimension:



AIRWAVE TECHNOLOGIES INC.