

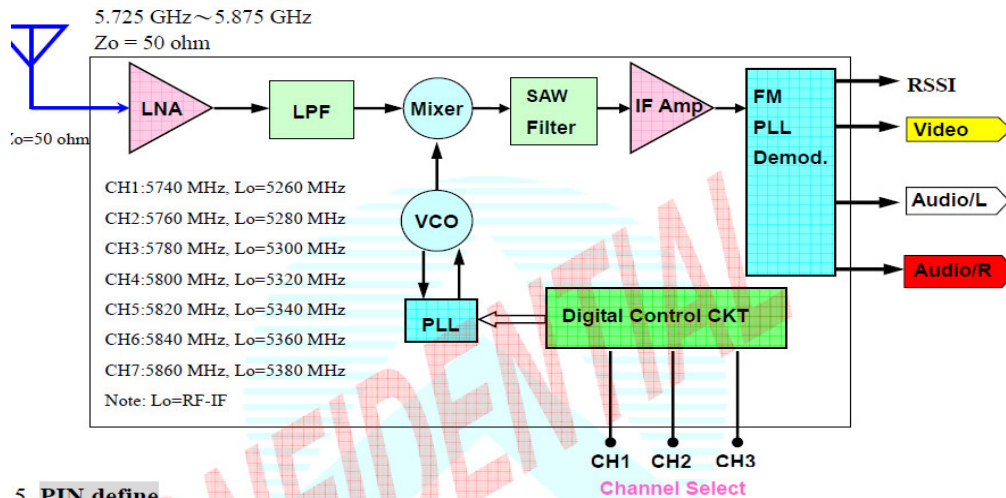
Wideband FM Receiver Module

Receiver Frequency
5740MHz (CH1)
5760MHz (CH2)
5780MHz (CH3)
5800MHz (CH4)
5820MHz (CH5)
5840MHz (CH6)
5860MHz (CH7)

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).

4. Function block:



5. PIN define

5. PIN define

Pin 01 **GND**
Pin 02 **RSSI**
Pin 03 **A/R**
Pin 04 **A/L**
Pin 05 **Video**
Pin 06 **VCC**
Pin 07 **Bypass**
Pin 08 **SW**
Pin 09 **Bit2**
Pin 10 **Bit1**
Pin 11 **Bit0**
Pin 12 **GND**



GND Pin 13
RFIN Pin 14

6. PIN descriptions:

PIN	NAME	Descriptions	PIN	NAME	Descriptions
01	GND	Ground	08	SW	Channel select. (See table 1)
02	RSSI	Received signal strength indicator	09	Bit2	Channel select. (See table 2)
03	A/R	Right sound signal output	10	Bit1	Channel select. (See table 2)
04	A/L	Left sound signal output	11	Bit0	Channel select. (See table 2)
05	Video	Video signal output	12	GND	Ground
06	VCC	DC +5V supply in	13	GND	RF Ground Pad
07	Bypass	DC Bypass	14	RF IN	RF received signal input Pad ⁽¹⁾

For tact sw mode, Bit2, Bit1, Bit0 must be treat as output.

SW	Descriptions	Frequency
	Tack switch	5740→5760→5780→5800→5820→5840→5860(MHz) CH1 CH2 CH3 CH4 CH5 CH6 CH7

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

Pin09 Bit2	Pin10 Bit1	Pin11 Bit0	Descriptions	Receiver Frequency
0	0	0	Pin09, Pin10, Pin11 connect to GND.	5740MHz (CH1)
0	0	1	Pin 09 and Pin 10 connect to GND, Pin 11 OPEN.	5760MHz (CH2)
0	1	0	Pin 09 and Pin 11 connect to GND, Pin 10 OPEN.	5780MHz (CH3)
0	1	1	Pin 09 connect to GND, Pin 10 and Pin 11 OPEN.	5800MHz (CH4)
1	0	0	Pin 10 and Pin 11 connect to GND, Pin 09 OPEN.	5820MHz (CH5)
1	0	1	Pin 10 connect to GND, Pin 09 and Pin 11 OPEN.	5840MHz (CH6)
1	1	0	Pin 11 connect to GND, Pin 09 and Pin 10 OPEN.	5860MHz (CH7)

Note 1: Forced Pin 02 (RSSI) to OPEN if RSSI function is unnecessary.

7. Absolute maximum ratings:

RF/ DC Parameters		Min.	Typ.	Max.	Unit
Storage Temperature Range		-25	-	85	°C
Supply voltage		-0.5	-	5.5	V

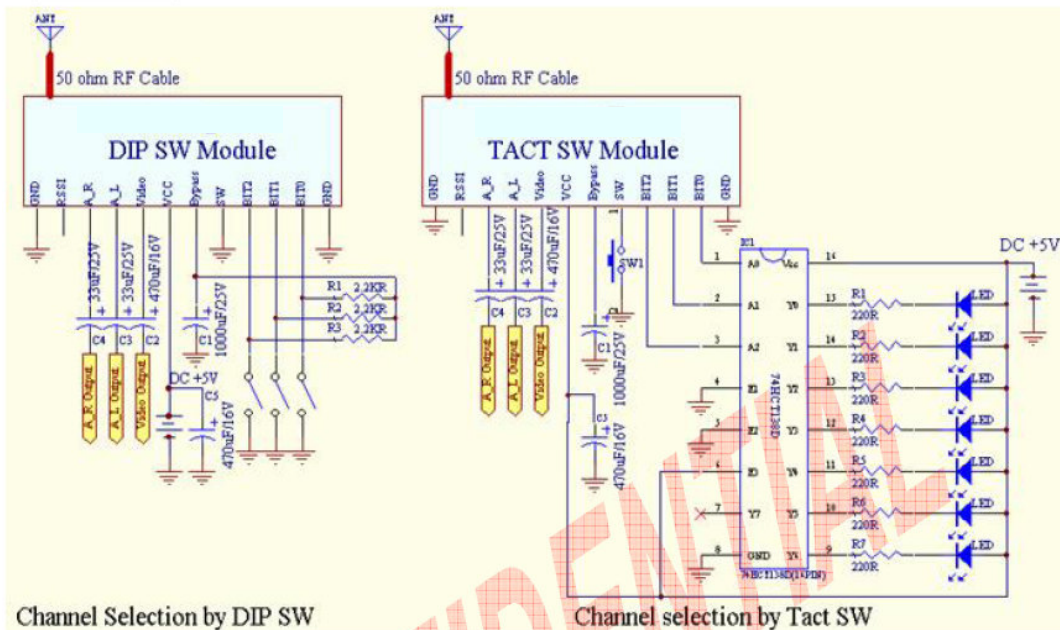
The maximum rating must not be exceeded at any time. Do not operate the device under conditions outside the above.

8. DC/AC Electrical characteristic:

(VCC=DC +5V, 25°C)

RF/ DC Parameters		Min.	Typ.	Max.	Unit
Supply voltage		4.9	5	5.1	V
Supply current		190	210	240	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. (+/-0.2Volt)			
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 : 1kHz Sine Wave)		1.4~1.9Vp-p			
RSSI					
RSSI output voltage (RF input -10dBm~-85dBm)		0.2~1.5V			

9. Test circuit:



Technical drawing of the 1000mm x 600mm x 100mm cabinet showing front, side, and detail views with dimensions in mm.

Front View Dimensions:

- Overall Width: 1000.00
- Overall Height: 600.00
- Internal Width: 900.00
- Internal Height: 500.00

Side View Dimensions:

- Overall Depth: 100.00
- Top Flange Thickness: 5.80
- Top Flange Width: 0.80
- Top Flange Height: 4.51
- Door Thickness: 1.20
- Internal Depth: 45.24
- Bottom Flange Thickness: 1.20

Detail View Dimensions:

- Top Flange Thickness: 2.80
- Top Flange Width: 1.40
- Bottom Flange Thickness: 1.20
- Internal Depth: 45.24

Unit:mm Tolerance:±0.25

PCB MOUNTING

