



## KEY FEATURES

DC Characteristics	
Storing Temperature	-30~+85°C
Power Supply	5.0V
Current Consumption	300Max
Environmental Specification	
Operating Temperature	-10~+65°C
Operating Humidity	85%RH
RF	
Receiving Frequency Range	1050~1380MHz
Voltage Standing Wave Ratio	2:1
Demodulation System	FM/PLL
IF	480MHz
ANT. Input Impedance	50Ω, Typ.
LO Frequency Stabilization	±200kHz
LO Frequency Precision	±200kHz
LO Control	PLL
Input LO Leak	-65dBm
Receiving Sensitivity	-95dBm
Input Level Range	-95dBm~+5dBm
Video Characteristics	
Video Output Impedance	75Ω, Typ.
Video Output Level	1Vp-p, Typ.
Video Polarity	Negative
Video Frequency Responce	±5dB, Max. 50Hz~6MHz
Differential Gain	±5%, Max
Differential Phase	±5Deg., Max
3Db IF WIDEBAND	16.5MHz
S/N	38dB, Min
RSSI Output Voltage(-30dBm~-90dbm)	1.3~0.7V

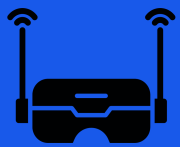


Board code: SM1370R

## APPLICATIONS

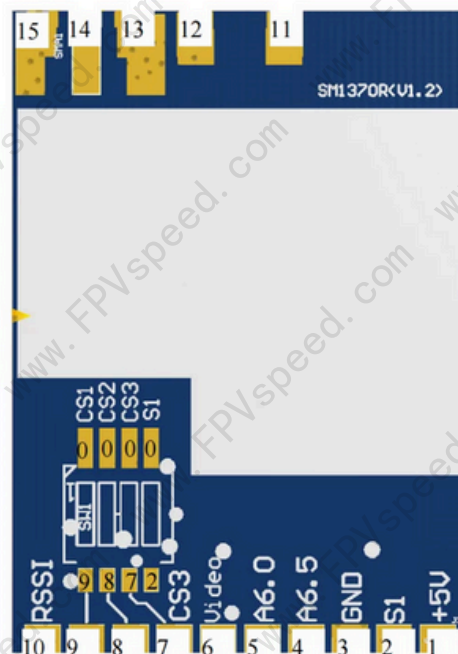
- FPV Drone Racing
- UAV Communication Systems
- Remote Vehicle Monitoring
- Wireless Video Transmission Systems

Audio	
Audio Output Impedance	2KΩ, Typ.
Audio Output Level	1±0.2Vp-p, Typ.
Audio Output Frequency Range	100Hz~20kHz
Audio Carrier	6.0MHz(AR), 6.5MHz(AL)
Audio Carrier Precision	±30kHz
Audio S/N(50Hz~15kHz)	50dB, Min
THD: (50Hz~15kHz, 3 Vp-p) Sine Wave	1.5%,Max



Pin No.	Function
1	+5V IN
2	S1, Frequency SEL.
3	GND
4	Audio A6.5 Out
5	Audio A6.0 Out
6	Video Out
7	CS3: Refer to Table1
8	CS2: Refer to Table1
9	CS1: Refer to Table1
10	RSSI
11	GND
12	GND
13	GND
14	ANT IN
15	GND

Pad No.	Function
2	Connected with S1
7	Connected with CS3
8	Connected with CS2
9	Connected with CS1
0	Connected with GND

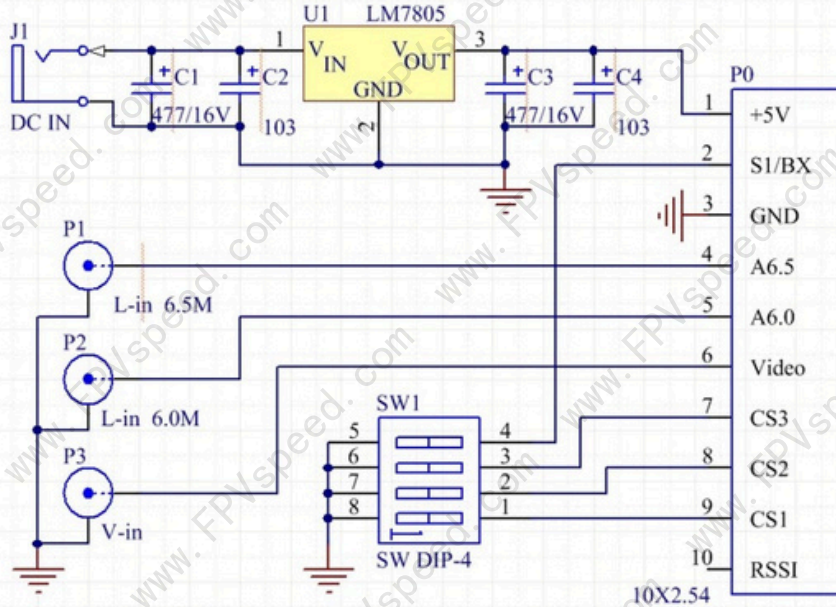


**TABLE 1**

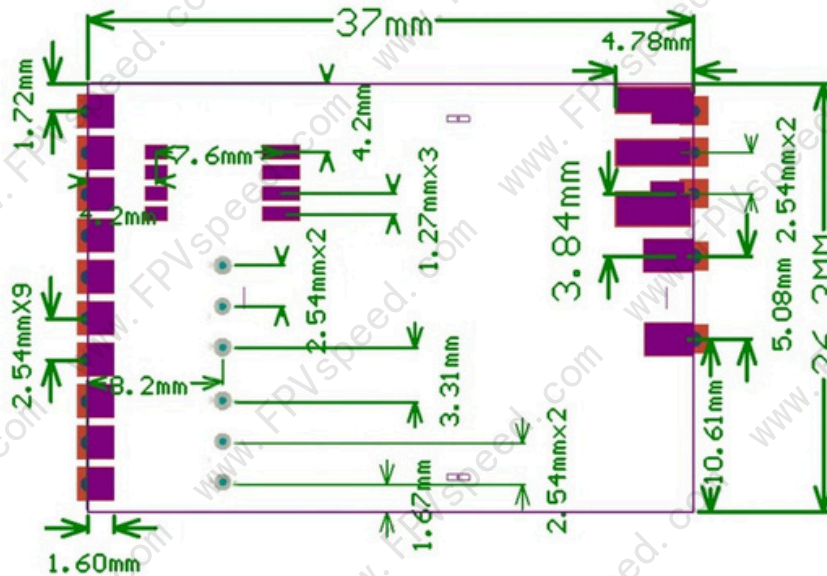
CHANNEL/LO	P7(CS3)	P8(CS2)	P9(CS1)	P10(S1)	
Frequency Band A (Frequency Group1) : S1=H S2=H					
A1: 1080MHz/1560MHz	0	0	0	1	
A2: 1120MHz/1600MHz	0	0	1	1	
A3: 1160MHz/1640MHz	0	1	0	1	
A4: 1200MHz/1680MHz	0	1	1	1	
A5: 1240MHz/1720MHz	1	0	0	1	
A6: 1280MHz/1760MHz	1	0	1	1	
A7: 1320MHz/1800MHz	1	1	0	1	
A8: 1360MHz/1840MHz	1	1	1	1	
Frequency Band B (Frequency Group1 : S1=L)					
B1: 1080MHz/1560MHz	0	0	0	0	
B2: 1120MHz/1600MHz	0	0	1	0	
B3: 1160MHz/1640MHz	0	1	0	0	
B4: 1200MHz/1680MHz	0	1	1	0	
B5: 1258MHz/1720MHz	1	0	0	0	
B6: 1280MHz/1760MHz	1	0	1	0	
B7: 1320MHz/1800MHz	1	1	0	0	
B8: 1360MHz/1840MHz	1	1	1	0	



### APPLICATION CIRCUIT



### DIMENSION



### DISCLAIMER

**!** This product is intended for civilian and commercial use only. It is strictly prohibited from being used for any military purposes or activities.