



Technical Description:

The brief circuit description is listed as follows:

- U1 and associated circuit act as MCU.
- U2, U3, U4 and associated circuit act as Voltage Regulator.
- U5 and associated circuit act as Charging Circuit.
- U6 and associated circuit act as S DRAM and Flash.
- U7 and associated circuit act as VGA CMOS.
- U8 and associated circuit act as 2.4GHz RF Module.
- U9, U10 and associated circuit act as Motor Circuit.
- U1, U2 and associated circuit (external PCB) act as Camera Circuit.
- X1 and associated circuit act as the clock frequency of U1.
- Y1 and associated circuit act as the clock frequency of RF Module.

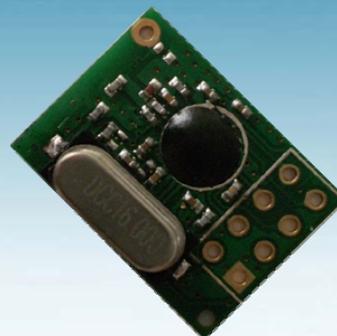
Antenna Used: Channel Separation:

The sample supplied operated on 129 channels, nominally at 2401MHz - 2465MHz. The channel is separated by 0.0005GHz channel spacing.

CWDP105-GO

2.4GHz Transceiver

The CWDP105-GO module is designed for 2.4GHz ISM band wireless applications using AMICCOM A7105 (FSK or GFSK) transceiver. This module features a fully programmable frequency synthesizer by SPI. The maximum data rate is 500Kbps.



Electrical specification

Item	Specification	Remark
Supply voltage	2.5V~3.6V	
Current consumption	1uA (typical) @Sleep mode 0.3mA (typical) @Idle mode 1.7mA (typical) @Stand-by mode 9mA (typical) @PLL Mode 16mA (typical) @Rx mode 20mA (typical) @Tx mode (Pout = 0dBm)	
Frequency	2400 – 2483 MHz	ISM band
Transmit output power	0 dBm @ room temperature	typical
Rx sensitivity	-105 dBm (typical) @ 10Kbps mode, Dev = 40 KHz -100 dBm (typical) @ 250Kbps mode, Dev = 93 KHz -96 dBm (typical) @ 500Kbps mode, Dev = 186 KHz	BER \leq 1E-3
Modulation	FSK or GFSK	
Transmission distance	50meter	BER \leq 1E-3
Interface	8 pin (2 x 4) header, Pitch: 2.54m/m	
Dimension	20mm(L) x 14.5mm(W) x 5mm(H)	Not include the connector
Operating temperature	-40 ~ 85 °C	

Application:

- ◆ Telemetry,
- ◆ Wireless Toys,
- ◆ Remote Control,
- ◆ Wireless Speaker,
- ◆ Wireless Earphone,
- ◆ Walkie-Talkie,
- ◆ Wireless House,
- ◆ Keyboard.

Interface

Pin No.	Symbol	Function Description	Remark
1	GND	Ground	
2	VIN	RF Module Supply Voltage Input	1.9V ~ 3.6V
3	NC	No Connection	
4	SCS	SPI Chip Seiection	
5	SCK	SPI Clock	
6	SDIO	SPI Data I/O	
7	GIO1	General Purpose I/O 1	
8	GIO2	General Purpose I/O 2	

Module Dimension Drawing (Top view)

