Operation Descriptipon

DIP3226-His a Wireless Router/Bridge/ Access Point/CPE. It provides high access to the Internet and upstream up to 300 Mbps, the Board can be powered through this interface to it. With all the features of the wireless router, security mechanisms, support for IEEE, 802.11 b\g\n, standard brings users remarkable wireless Internet experience. In addition, the compact appearance of the product is able to give people a kind of intimacy.

Power Supply

DIP3226-Hwas powered by DC 24.0V adapter from AC 100-240V, 50Hz/60Hz;

Physical Interfaces: DIP;

CPU

Modular AR9341 used as CPU powered by DC3.3V, ingrate 25MHz crystal oscillator; provide memory interface, 16MBFlash, LED, GPIOs, UART and 128MB DDR2 SDRAM function;

WLAN Wireless Function

DIP3226-H can provide WLAN connection services; Modular AR9341 can support 2.4GHz WLAN services, ingrate 25MHz crystal oscillator. Modular AR9341 support 2*2MIMO technology to extend capacity;

Features

〇IEEE 802.11b/g/n up to 1200Mbps Wi-Fi compliant

〇Fully Backward compatible with 802.11b/g devices

〇Supports IEEE802.e Quality of Service (QoS)

〇Support USB 2.0

〇 Supports 64/128-bit WEP encryption, WPA and the latest WPA2 encryption security authentication

〇Supports auto wireless channel selection

〇Supports auto negotiation/manual mode for 802.11b/g/n

〇Built-in DHCP server to automatic assign IP address

More technical information as follows

Wireless Standard:802.11b/g/a/n

Wireless Signal Rates: Up to 1200Mbps

Operating Mode: default on b/g/n, n mixed mode

Wireless Communication: Enabled

Security: Disabled

SSID broadcast control: Enabled

Transmission Speed: Auto

Automatic Quality of Service(QoS) for reliable Internet, voiceand gaming applications: Support

Wi-Fi Protected Setup: Default Enabled

Cafe-style guest network: Support

Wireless Security: 64/128-bit WEP, WPA / WPA2, WPA-PSK/ WPA2-PSK encryption

RX sensitivity:

11b mode:-89dBm

11g mode:-76dBm

11n HT20 mode: -73dBm

11n HT40 mode: -70dBm
Modulation:
CCK, DQPSK, DBPSK for DSSS
256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDM
Transfer Rate:
802.11b: 11.0/ 5.5/ 2.0/ 1.0Mbps
802.11g: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps
802.11n: up to 300.0Mbps
DIP3226-H has 2 integral antenna which meets FCC Part 15.203 requirement, while only support 2*2 MIMO technical (antenna 0 and antenna 1 was 2T2R MIMO for 2.4GHz), the maximum gain is 14.0dBi for each antenna, Directional Gain is 14.1+10log(2)=17.01dBi for MIMO CDD mode.

Synchronize transmit for difference modulation type as follow;

Modulation Type	Frequency Band	Transmit		Antenna 0 and Antenna 2 synchronization transmit
		Antenna 0	Antenna 1	
IEEE 802.11 b	2.4GHz	Yes	Yes	No
IEEE 802.11 g	2.4GHz	Yes	Yes	No
IEEE 802.11 n HT20	2.4GHz	Yes	Yes	Yes
IEEE 802.11 n HT40	2.4GHz	Yes	Yes	Yes

Manufacturing tolerance

2.4GHz WIFI

IEEE 802.11 b (AVG)						
Frequency (MHz)	Antenna 0			Antenna 1		
	2412	2437	2462	2412	2437	2462
Target (dBm)	9.0	9.0	9.0	9.0	9.0	9.0
Tolerance ±(dB)	1.0	1.0	1.0	1.0	1.0	1.0

IEEE 802.11 g (AVG)						
Frequency (MHz)	Antenna 0			Antenna 1		
	2412	2437	2462	2412	2437	2462
Target (dBm)	7.0	7.0	7.0	7.0	7.0	7.0
Tolerance ±(dB)	1.0	1.0	1.0	1.0	1.0	1.0

IEEE 802.11 n HT20 (AVG)						
Frequency (MHz)	Antenna 0			Antenna 1		
	2412	2437	2462	2412	2437	2462
Target (dBm)	7.0	7.0	7.0	7.0	7.0	7.0
Tolerance ±(dB)	1.0	1.0	1.0	1.0	1.0	1.0

IEEE 802.11 n HT40 (AVG)						
Frequency (MHz)	Antenna 0			Antenna 1		
	2422	2437	2452	2422	2437	2452
Target (dBm)	6.0	6.0	6.0	6.0	6.0	6.0
Tolerance ±(dB)	1.0	1.0	1.0	1.0	1.0	1.0