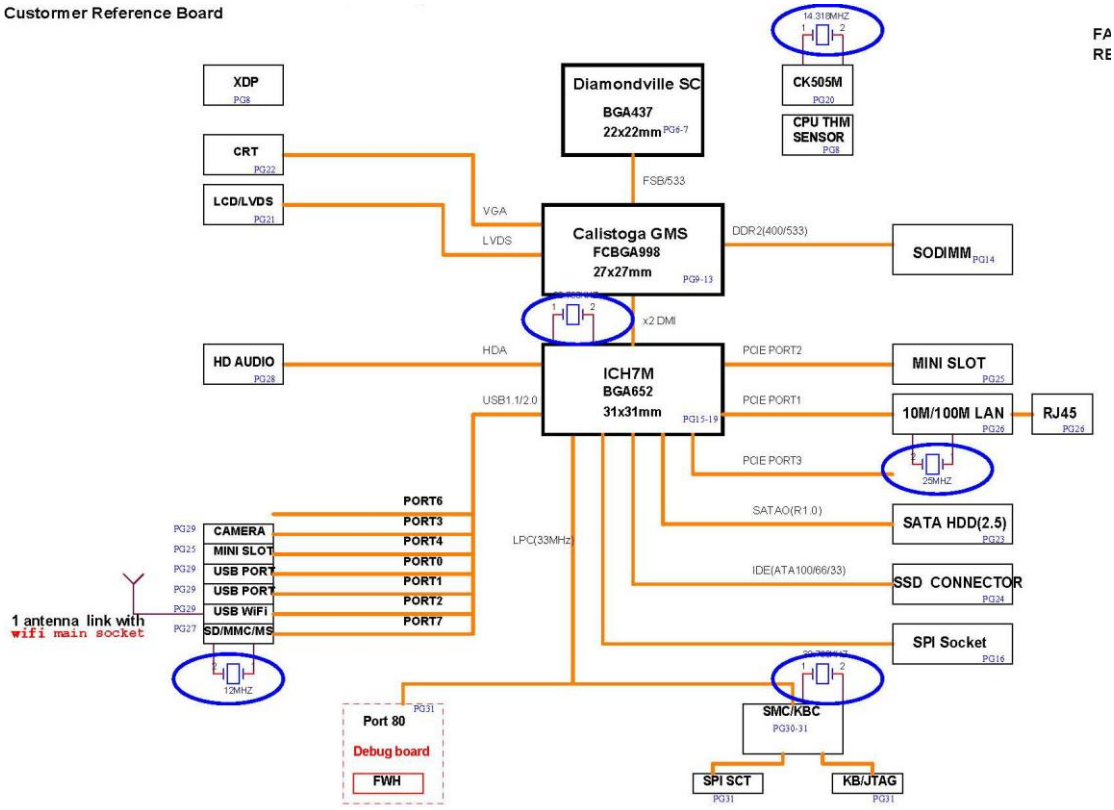
PC-88012N operation description

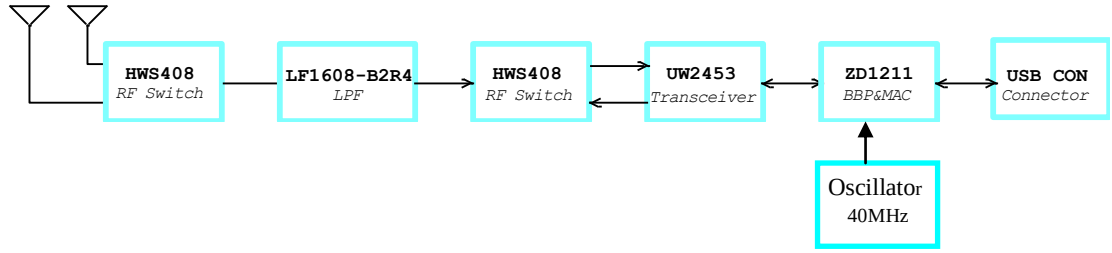


PC-88012N setup：

INTEL SLB73 1.6GHZ（Atom N270）CPU，Chipset is 945GSE＋ICH7M，DDR2 533 memory bank，two USB ports，a VGA interface，an earphone jack，a microphone jack，a multi-card holder（support SD/MS/MMC），a 10M/100M LAN interface，a 130M pixels camera，a wireless LAN adapter interface，8” LCD panel.

WiFi Module

1.The WiFi Module Diagram



2.The WiFi Module Function Description

The WiFi module is accord with IEEE 802.11b/g wireless local area network (WLAN), It supports data rate 6, 9, 12, 18, 24, 36, 48 and 54Mbit/s in OFDM mode,5.5 and 11Mbits/s in CCK mode,1,2Mbits/s in DSSS mode. The module integrate the standard compliant hardware security engine to improve the performance in security mode. It can supports WEP, AES, WPA, WPA2 encryption algorithm.

4.The WiFi module electric parameter

1)Features

At 802.11b the board support rate : 1M、2M、5.5M、11M bps

At 802.11g the board support rate : 6M、9M、12M、18M、24M、36M、48M、54M

Modulation Scheme : DBPSK、DQPSK、CCK、OFDM

The channel center frequency and CHNL_ID numbers shall be shown in the following table.

802.11b/g Channel Center Frequency	
CHNL_ID	Frequency (MHz)
1	2412
2	2417
3	2422
4	2427
5	2432
6	2437
7	2442
8	2447
9	2452
10	2457
11	2462

2) Performance

a. Receive Sensitivity

Mode	Rx Sensitivity
CCK 1M	-95dBm
CCK 11M	-88dBm
2.4G OFDM 6M	-92dBm
2.4G OFDM 54M	-74dBM

b. Transmitter Power

Mode	Tx Power
CCK 11M	18dBm
2.4G OFDM 54M	15dBm

c. Power Consumption

ZD1211B + UW2453		
	802.11g, CH1 Data rate = 54Mbps Pout = 15dBm	802.11b, CH1 Data rate = 11Mbps Pout =18dBm
Power Save Mode	52 mA	52 mA
Suspend Mode	1.6 mA	1.6 mA
Standby Mode	180 mA	162 mA
Rx Mode	180 mA	163 mA
Transmit Mode	235 mA	246 mA
Transmit Mode (Continuous Power)	280 mA	293 mA

3）Antenna Specification

Antenna Type	PIFA
Frequency Range	2400-2500MHz
Center Frequency	2450Mhz
Peak Gain(Max)	1.5dBi
VSWR	<2.0
Impedance	50Ohms
Connect Cable	Φ 1.13/length(unknow) mm
Connector	I-PEX
Number of Antenna	1

4）Single-Antenna work principle

Single-Antenna with feedback cable connect with the WiFi module through the standard connector I-PEX.