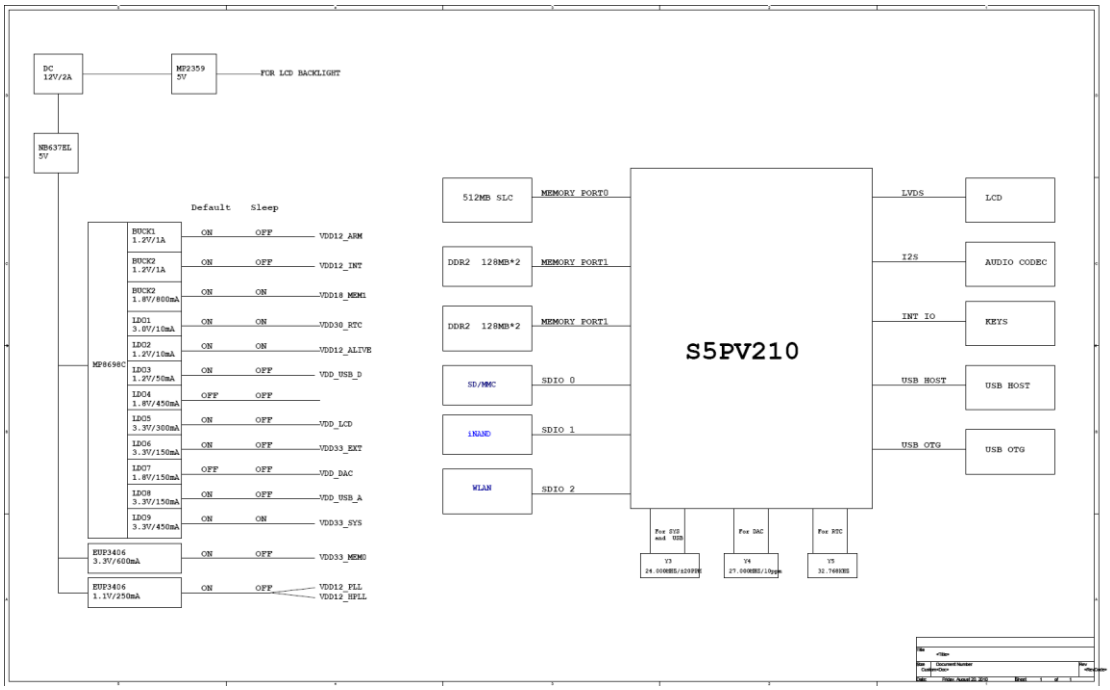
349765 Operation Description

1）System Block Diagram

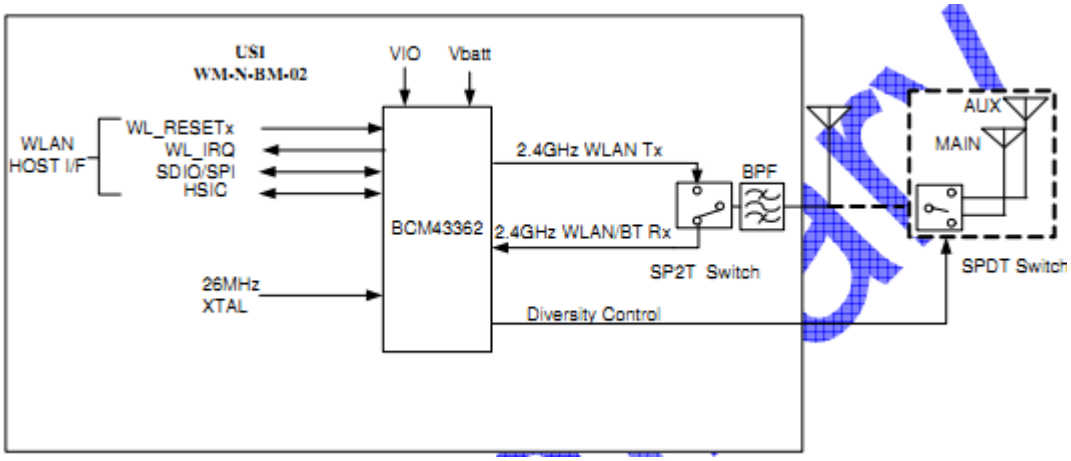


MID-D7001 setup：

Samsung S5PV210（Cortex A8 ）CPU，Operational Frequency is 1GHz，512MB DDR2，a USB HOST port，a USB OTG port，an audio jack，a multi-card holder（support SD/MMC），7” LCD DISPLAY with touchpanel，4GB iNand.

WiFi Module

1.Simplifide block diagram



2.WM-N-BM-02 Features

- Lead Free design which supporting Green design requirement, RoHS Compliance.
- Small size suitable for low volume system integration.
- Low power consumption & excellent power management performance extend battery life.
- 2.412-2.484 GHz two SKUs for worldwide market.
- Easy for integration into mobile and handheld device with flexible system configuration and antenna design.
- Supports per packet Rx Antenna diversity

3. WIRELESS SPECIFICATIONS

The WM-N-BM-02 module complies with the following features and standards;

Features	**Description**
WLAN Standards	IEEE 802 Part 11b/g/n (802.11b/g/n)
Antenna Port	Support Single Antenna for WiFi
Frequency Band	2.412 GHz – 2.484 GHz

4. RADIO SPECIFICATIONS 802.11B/G/N

Features	**Description**		
Frequency Band	2.4000 GHz – 2.484 GHz (2.4 GHz ISM Band)		
Number of selectable Sub channels	14 channels		
Modulation	OFDM, DSSS (Direct Sequence Spread Spectrum), DBPSK, DQPSK, CCK , 16QAM, 64QAM		
Supported rates	1,2, 5.5,11,6,9,12,24,36,48,54 Mbps		
Maximum receive level -	-10dBm (with PER < 8%)		
Output Power	17 dBm +2/-2 dBm for 1, 2, 5.5, 11Mbps 14 dBm +2/-2 dBm for 6, 9, 12, 18, 24, 36, 48, 54 Mbps 12 dBm +2/-2 dBm for 11n (HT20)		
EVM	Typical	Maximum	Unit
@11 Mbps	-13	-11	dB
@1 Mbps	-13	-11	dB
@54 Mbps	-30	-25	dB
@6 Mbps	-30	-22	dB
HT20 @ MCS0	-30	-22	dB
HT20 @ MCS7	-30	-28	dB

Electrical Properties for 2.4G

Item	Property
Impedance	50 (Typ.)
VSWR	≦ 3
Return Loss	-9 dB max
Gain	1 dBi (Typ.)
Radiation pattern	Vertical Polarization
Electrical wave	1/4λ dipole

Antenna Location