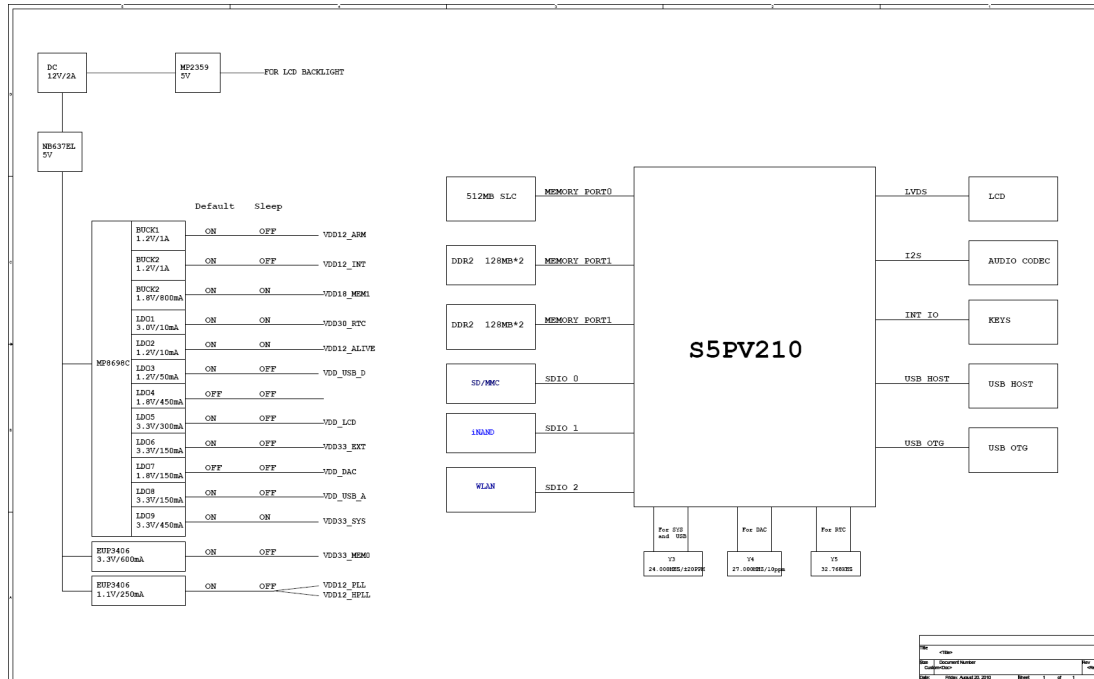


304662 Operation Description

1 System Block Diagram



2 Production Description

Samsung S5PV210 (Cortex A8) CPU, Operational Frequency is 800MHz/1GHz, 512MB DDR2, a USB HOST port, a USB OTG port, an audio jack, a multi-card holder (support SD/MMC), 10.1" AUO LCD DISPLAY with touchpanel, 4GB iNand.

3 WLAN description

The 304662 WiFi module which is the onboard module communicate with the CPU by SDIO interface

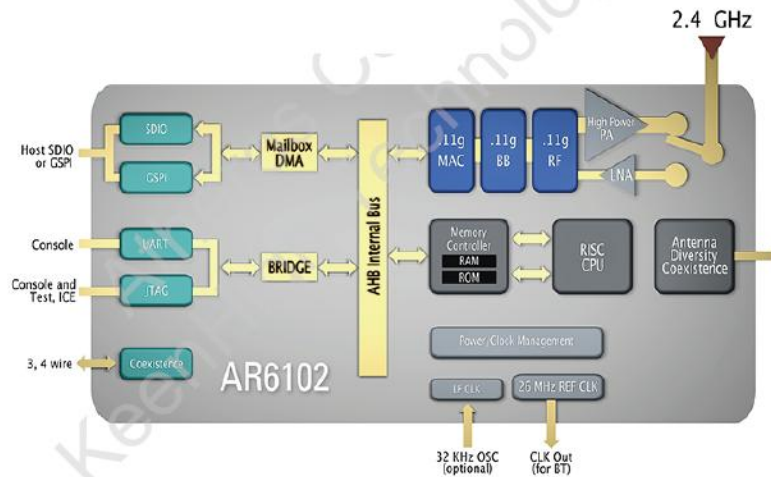
WiFi Module technical details as follow

3.1 Features

- IEEE 802.11b/g compliant
- Data rates of 1–54 Mbps for 802.11g
- Advanced power management to minimize standby, sleep and active power
- Security support for WPS, WPA2, WPA, WAPI and protected management frames
- Support for 2.4 GHz operation in all available bands in all regulatory domains
- Full 802.11e QoS support including WMM and U-APSD
- Support for fast Tx and Rx antenna diversity allowing optimal antenna selection on a perpacket basis
- Supports both SDIO 1.1 and GSPI host interfaces.
- Standard 2, 3 and 4 wire Bluetooth coexistence handshake support
- 16550-compliant UART Wake-on-Wireless (WoW) maximizes host sleep duration

- 7.4 x 8 mm LGA package
- Pre-certified to meet FCC, ETSI, and TELEC standards
- Integrated PA, LNA, RF switch and High Freq Reference Clock, minimizing external component count
- Integrated RF shielding
- Supports cellular co-existence with an external band-pass filter

3.2 Simplified block diagram



3.3 Power consumption

Rate [Mbps]	Target Output Power [dBm]	Current Consumption [mA]			Total Power Consumption [mW]
		@1.2 V	@1.8 V	@3.3 V	
1	15	37	51	97	456
2	15	37	51	97	456
5.5	15	37	51	97	456
11	15	37	51	97	456
6	15	44	65	97	490
9	15	44	65	97	490
12	15	44	65	-	490
18	15	44	65	97	490
24	15	45	65	96	488
36	14	45	58	91	459
48	13	45	55	85	433
54	11	45	65	76	422

3.4 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

3.5 Antenna Specification

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

4 Antenna Location

