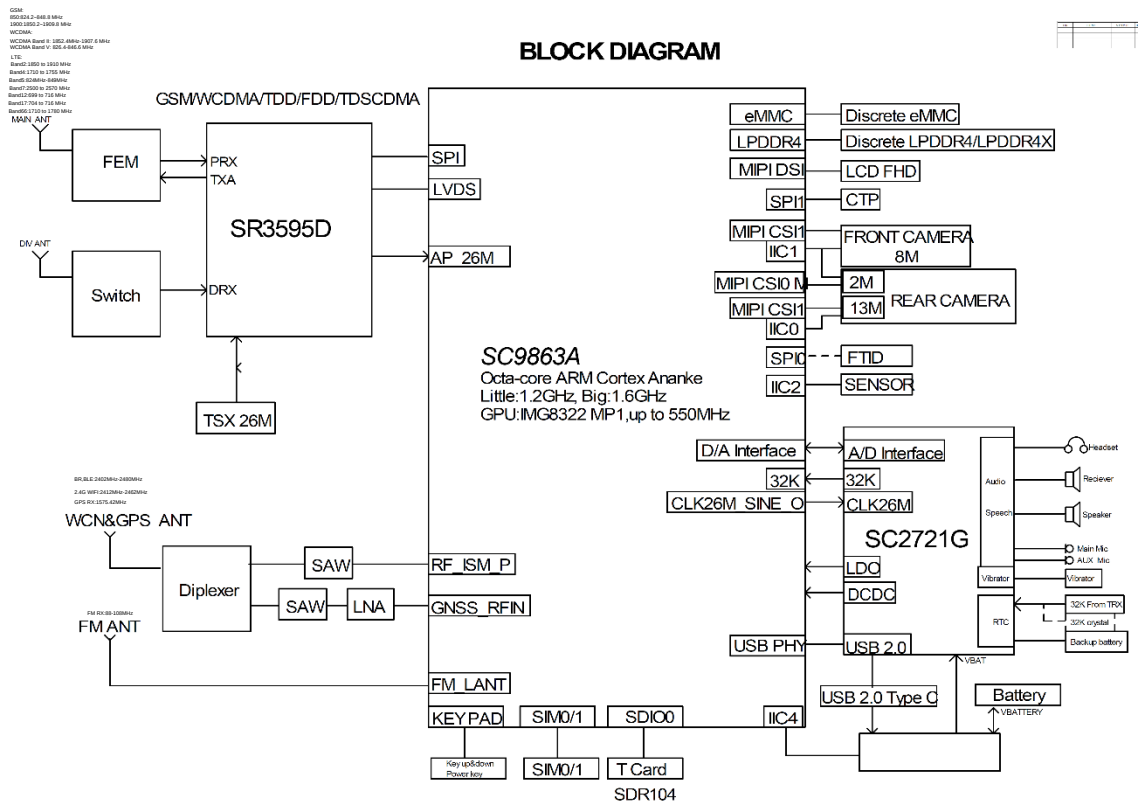


Operating Description

1. Block diagram



SC9863A is a highly integrated application processor with embedded TD-LTE, LTE FDD, WCDMA and GSM/GPRS/EDGE to support Dual SIM Dual.

Standby up to LTE+LTE. It consists of 8-cores ARM Cortex-A55 core as application processor, which includes a NEON/Dot Product multimedia processing engine, Imagination Power VR Fentale GE8322 as 3D graphics accelerator, multi-standard multi-media accelerators and advanced audio subsystem, and also integrated Wifi/BT/FM/GNSS. The specially optimized architecture of SC9863A can achieve high performance and low power for a lot of applications. Proprietary architectures and algorithms were developed for low power ASIC design and power management. Unique techniques are used for noise/offset calibration and cancellation. Overall, SC9863A chip set presents a high cost-effective platform for Android mobile devices.

2. Technical Parameters

Product Name:	Smart phone
Model/Type reference:	WAVE 8C
Serial Model:	N/A
Power Supply:	DC 3.85V from battery
Adapter:	Model: HJ-0502000W2-US Input: 100-240V~50/60Hz 0.3A

	Output: 5.0V=2.0A 10.0W
Hardware Version:	L617A_V1
Software Version:	WAVE_8C_EEA_L617_V1.0
GSM:	
Operation Band:	☒ GSM 900 ☒ DCS 1800 (EU Frequency) ☒ GSM 850 ☒ PCS1900 (none EU Frequency)
Supported type:	GSM/GPRS, EGPRS
Operation Frequency Range:	Transmit: GSM900: 880MHz~915MHz, DCS1800: 1710MHz~1785MHz
	Receive: GSM900: 925MHz~960MHz, DCS1800: 1805MHz~1880MHz
Power Class:	GSM850, GSM900: Power Class 4 DCS1800, PCS1900:Power Class 1
Modulation Type:	GMSK for GSM/GPRS, 8-PSK for EGPRS
GSM Release Version	R99
GPRS Multisport Class	12
EGPRS Multisport Class	12
Antenna Type	PIFA antenna
WCDMA:	
Operation Band:	☒ FDD Band I, ☒ FDD Band VIII
Supported type:	WCDMA/HSUPA/HSDPA
Operation Frequency Range	TX: 1922.6MHz~1977.4MHz (FDD Band I) TX: 882.6MHz~912.4MHz (FDD Band VIII)
	RX: 2112.6MHz~2167.4MHz (FDD Band I) RX: 927.6MHz~957.4MHz (FDD Band VIII)
Power Class:	3
Modulation Type:	QPSK for WCDMA/HSUPA/HSDPA
WCDMA Release Version:	R9
HSDPA Category:	Category 14
HSUPA Category:	Category 6
Antenna Type	PIFA antenna
LTE:	
Operation Band:	E-UTRA Band 2, band 4, band5, band7, band12, band17, band66
Support Bandwidth:	Band 2: ☒ 1.4MHz, ☒ 3MHz, ☒ 5MHz, ☒ 10MHz, ☒ 15MHz, ☒ 20MHz Band 4: ☒ 1.4MHz, ☒ 3MHz, ☒ 5MHz, ☒ 10MHz, ☒ 15MHz, ☒ 20MHz Band 5: ☒ 1.4MHz, ☒ 3MHz, ☒ 5MHz, ☒ 10MHz Band 7: ☒ 5MHz, ☒ 10MHz, ☒ 15MHz, ☒ 20MHz

	Band 12: ☒ 1.4MHz, ☒ 3MHz, ☒ 5MHz, ☒ 10MHz Band 17: ☒ 15MHz, ☒ 20MHz Band 66: ☒ 1.4MHz, ☒ 3MHz, ☒ 5MHz, ☒ 10MHz, ☒ 15MHz, ☒ 20MHz
Frequency Range:	Band 2:uplink 1850 to 1910 MHz; downlink 1930 to 1990 MHz Band 4:uplink 1710 to 1755 MHz; downlink 2110 to 2155 MHz Band 5:uplink 824MHz-849MHz; downlink 869MHz-894MHz Band 7:uplink 2500 to 2570 MHz; downlink 2620 to 2690 MHz Band 12:uplink 699 to 716 MHz; downlink 729 to 746 MHz Band 17:uplink 704 to 716 MHz; downlink 734 to 746 MHz Band 66:uplink 1710 to 1780 MHz;downlink 2110 to 2200 MHz
Power Class:	Power Class 3
Modulation Type:	QPSK, 16QAM
Antenna type:	PIFA antenna
WIFI 2.4GHz	
Supported type:	802.11b/802.11g/802.11n(H20)/802.11n(H40)
Modulation:	802.11b: DSSS 802.11g/802.11n(H20)/802.11n(H40):OFDM
Operation frequency:	802.11b/802.11g/802.11n(H20): 2412MHz~2472MHz 802.11n(H40):2422MHz~2462MHz
Channel number:	802.11b/802.11g/802.11n(H20): 11 802.11n(H40):7
Channel separation:	5MHz
Antenna type:	PIFA antenna
Bluetooth:	
Version:	Supported BR/EDR
Modulation:	GFSK, $\pi/4$ DQPSK, 8DPSK
Operation frequency:	2402MHz~2480MHz
Channel number:	79
Channel separation:	1MHz
Antenna type:	PIFA antenna
Bluetooth LE:	
Supported type:	Bluetooth Low Energy
Modulation:	GFSK
Operation frequency:	2402MHz to 2480MHz
Channel number:	40
Channel separation:	2 MHz
Antenna type:	PIFA antenna

FM RX	
Modulation:	FM
Operation frequency:	87.5MHz~108MHz
Antenna type:	Integral Antenna
GPS RX	
Modulation:	MSK
Operation frequency:	1575.42MHz
Antenna type:	PIFA antenna