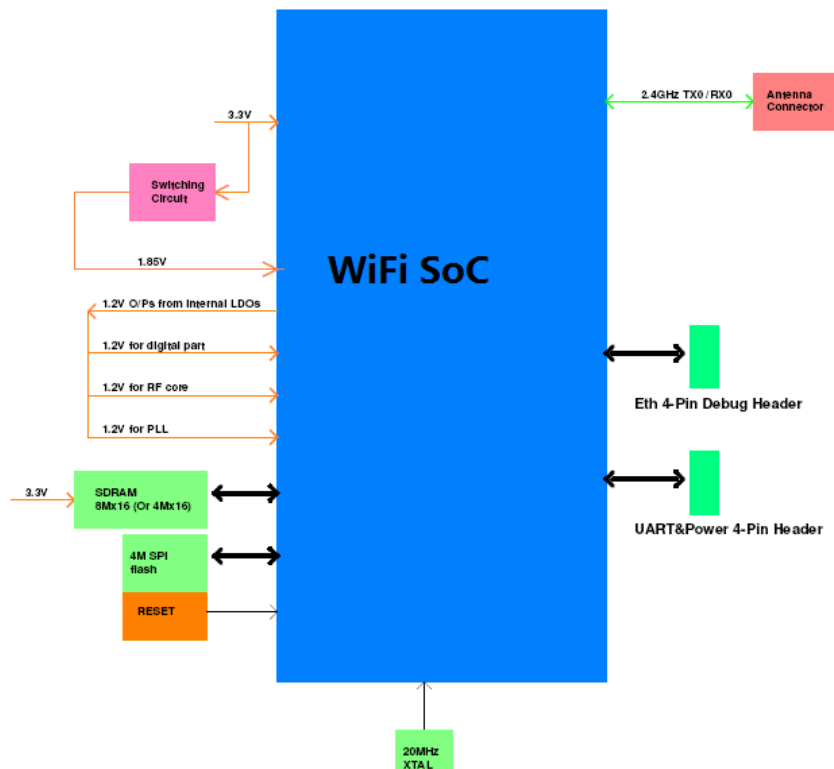
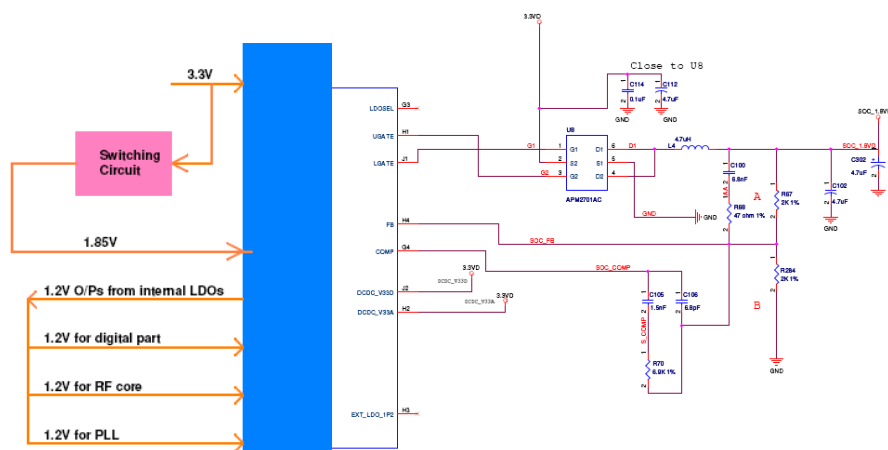


HF-A11 Hardware Circuit Description



Power Part Circuit:

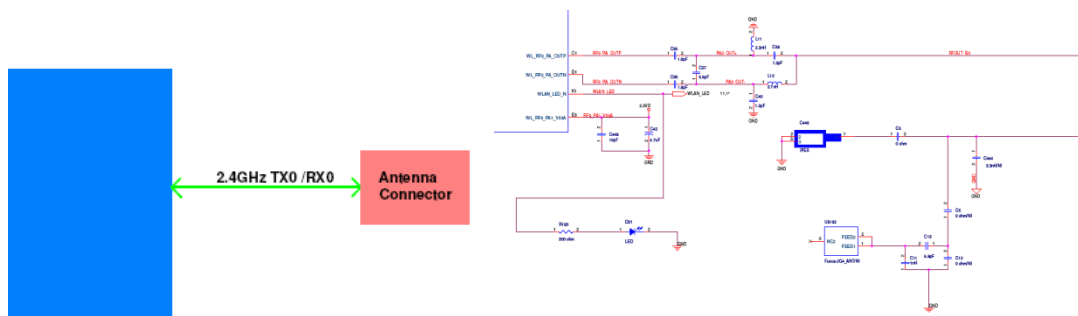
The Module powered by single 3.3V source and most components which include SDRAM/Flash use single 3.3V supply. The main chipset RT5350 has internal switching circuit as following to generate 1.85V supply, which as input to RT5350 internal LDO. The R5350 LDO output 1.2V provides the supply for RT5350 digital and RF core circuit.



RF Part Circuit:

The Wi-Fi module support 802.11b/g/n single band 2412-2472MHz and RF part circuit as follows

The module provides outside I-PEX connector for external antenna interface. The RF parameters as following table,

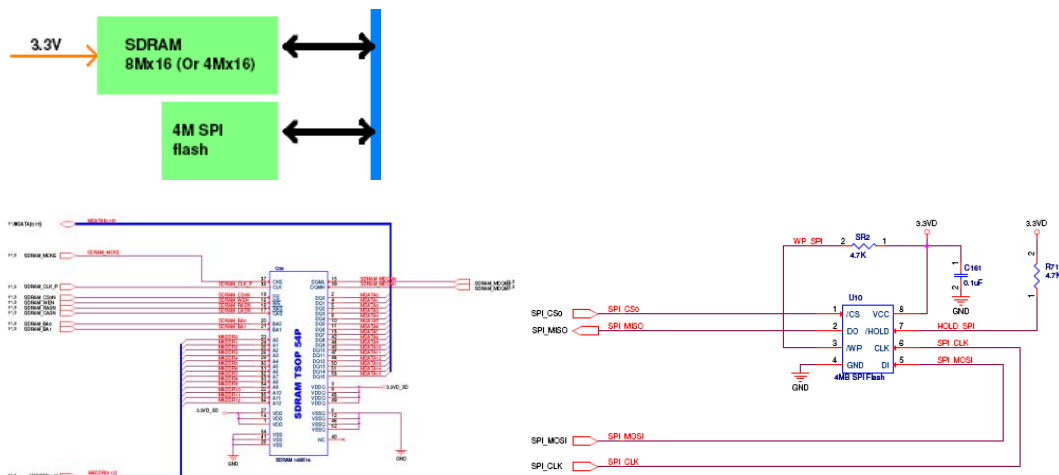


Class	Item	Parameters
Wireless Parameters	Certification	FCC/CE
	Wireless standard	802.11 b/g/n
	Frequency range	2.412GHz-2.472GHz
	Transmit Power	802.11b: +20 dBm (Max.)
		802.11g: +18 dBm (Max.)
		802.11n: +15 dBm (Max.)
		Configurable
	Receiver Sensitivity	802.11b: -89 dBm
		802.11g: -81dBm
		802.11n: -71dBm
	Antenna Option	External:I-PEX Connector

Memory Part Circuit:

The Wi-Fi module provides 8MB SDRAM data memory and 1~4MB SPI flash program memory, which support eCOS OS and Wi-Fi driver loaded from SPI flash to SDRAM after system boot up.

The memory part circuit as follows:



Clock Part Circuit:

The Wi-Fi Module use single 20MHz crystal as system clock, which also provide RF and Digital part clock. The crystal parameter requirement as follows:

- Frequency: 20MHz
- Frequency Offset: +/-20ppm
- VIH/VIL: VCC-0.3V/0.3V
- Duty Cycle: 45%~55%

