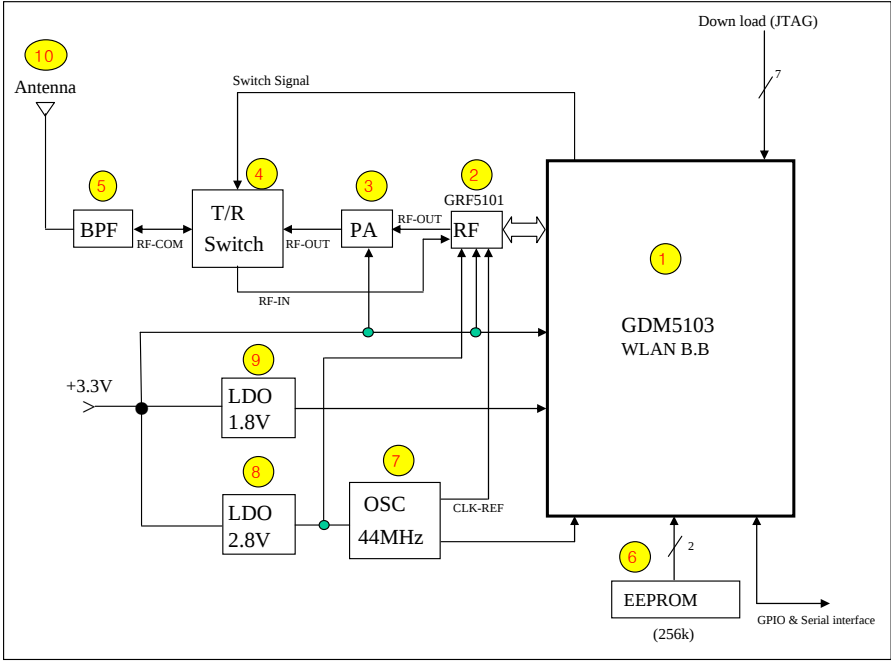


VWM-1G01A Operation Description



1	WLAN BASE BAND IC(U1)	The GDM5103 has the interface to connect to the external audio ADC/DAC, and includes the micro-processor to packet the in & out audio data through audio interface. It also includes digital spread spectrum baseband MODEM to transmit / receive the packetted audio data through RF chip by air. When it perform as audio transmitter, it send the data to RF chip with modulation through MODEM, after packet the audio data with adequate flow control information from external audio ADC. When it operate as audio receiver, it send the extracted audio data to the external audio DAC in specified timing, after modulation of the audio data (from RF chip) & packet through MODEM.
2	RF IC(U6)	The GRF5101 transmit the modulated baseband data through GDM5103 with 2.4GHz carrier frequency by air. For receiving, it act in the reversed way, i.e., it extrude the baseband data with 2.4GHz carrier frequency to send it to GDM5103.
3	PA AMP(U3)	It's for external RF Power Amplifier, to amplify the RF power (from GRF5101) and send it to air. Amplification is to send the RF signal to wider area by output of stronger RF signal.
4	RF SWITCH(U4)	Our module has one antenna for transmission / receiving path so, it's required to control the transmission / receiving path in time. RF switch decide the path of the control signal from GDM5103.
5	LC FILTERS(FL1)	It's Band Pass Filter for filtering of 2.4GHz frequency. It eliminate the spurious emission when transmit signal, and also erase interferer from unnecessary frequencies when receiving the signal.
6	EEPROM(U2)	EEPROM stores the required binary images to operate GDM5103, and also includes the RF parameters to make sure adequate operation of GRF5101. When booting, GDM5103 operate by download of the code from the connected EEPROM, and set-up right mode of GRF5101 by download the RF parameters from EEPROM.
7	OSCILLEATOR(U8)	44MHz oscillator provide main clock for operation of GDM5103 & GRF5101.
8	LDO REGULATOR(U10)	2.8V LDO supply the main voltage to GRF5101.
9	LDO REGULATOR(U9)	1.8V LDO supply the main voltage to GDM5103.
10	PATTERN ANT.	It perform as a final path to connect the module & air.