

## **Operational Description(TA04G-N65)**

Main chip part:

The chip MP1482 supplies the board main voltage +3.3V. +3.3V generate +2.5V by an audion Q1, +1.2V by a MOS tube U6, +1.8V by a MOS tube U16. These three voltage driver the main chip BCM63281. A 20MHz crystal oscillator provides the clock to the main chip. The main chip provides a 320MHz clock with DDRII SDRAM and provides a 100MHz PCI-E clock with the BCM43225 and provides a 33MHz PCI-E clock with the SPI flash

Wireless part:

The BCM43225 wireless chip required 2 voltages. One is the board main voltage +3.3V, the other is a +1.2V alone generated by MP1482. A 20MHz crystal oscillator provides the clock to the wireless chip. The wireless chip provides an 802.11b/g/n wireless solution. The maximum support rate is 270Mbps. The wireless chip and the main chip connection via PCI-E bus, it is a 100MHz clock bus.

DSL part:

The line driver chip BCM6301 is driven by +5V voltages. Integrated ADSL2+ transceiver and AFE of BCM63281 can support Annex A, B, C, and M deployments. The maximum support rate is 24Mbps.

100M eth port:

BCM63281 support 4 100M Ethernet port.

The EUT incorporates a MIMO function with 802.11b, 802.11g, dfaft 802.11n.

Physically, the EUT provides two completed transmit and two receivers. The device was tested in a MIMO type operation.