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Equipment Authorization Division
Application Processing Branch
7435 Oakland Mills Road
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Date : Oct. 19, 2000

Attention : To Whom It May Concern;

Reference: FCC ID : N79CNI-930M, Confirmation # EA97737

Subject : Tune up of RF power and frequency

Dear sir,

1. Regarding RF power tune up, CNI currently uses power Amp, PF01411B of Hitachi (part # 124 on the part list). PF01411B controls the transmission power upon input voltage of Vapc (0.5 ~2.2 V), please see the figure 1 below for the reference. Input voltage of the Vapc is controlled by PWM pin (Pulse width Modulation) of CPU, and factory worker sets the PWM value to have the RF power less than 33dBm. For your reference, range of PWM is from 0 to 250, and even if maximum value 250 is inputted, the RF power does not exceed 33.5dBm. In addition to this, CNI-930M is designed to limit the input voltage of Vapc to give the transmission power to be less than 33dBm.

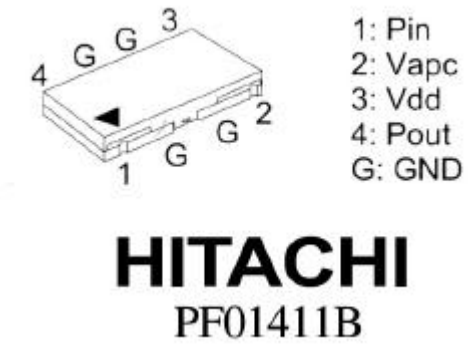

Figure 1.

2. Regarding frequency tune up, CNI already provided the information in the report as follows;

Frequency synthesizer and modulator

Frequency synthesizer consists of PLL part, VCO module and pre-modulation filter. The PLL part is composed of phase detector, loop filter, and 12.6Mhz VCTCXO

VCO module generates 896~901Mhz frequencies in accordance with the voltage which is from charge pump of PLL to loop filter. Programmable Divider in PLL makes the VCO output frequency to any channel value according to the frequency data from Logic CPU. Phase detector gets low and high frequencies from comparison of phase. Loop filter filters the frequencies to get a value of voltage. The voltage is input to VCO to achieve phase lock process.

Modulation is completed when modem IC signal of Logic part is input to VCO and authorized.

If you have any questions, please do not hesitate to contact us.

Best Regards,

CALI Kim
Marketing Manager