

Jun 13, 2024

Purpose of Change – Base Unit

Dear Sir/Madam:

**Re: Application for a Permissive Change Filing with
FCC ID: EW780-0899-00**

The purpose of this document is to describe all the changes that are made on the Base Unit to the new designed models (**C620**) from the original model (**VDP800**, certified on **Mar 8, 2018**) in order to meet the requirements. [The Purpose of the Changes is to use the higher-speed Ethernet switch \(10/100/1000M\).](#)

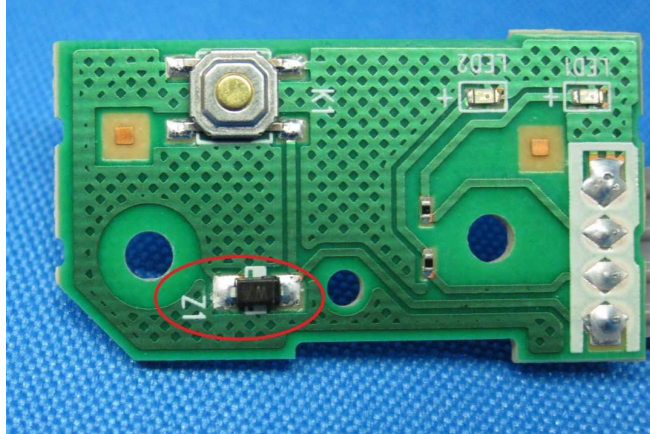
Changes of Base Unit from the original models to the new designed model:

1. To add Registration Procedures on Base Unit of model C620
2. External vertical co-linear antenna will be changed to internal vertical PCB loop antenna.
3. [Key PCB layout is changed and Z1 is changed to BZT52C6V2](#)
4. [Base Main PCB layout is changed because Ethernet switch \(U9\), AR8236 is changed to \(RTL8363NB with X2 Crystal 25MHz is deleted\) and the POE controller IC \(D025\), TPS23753A is changed to SD4954B.](#)
5. [Regulator IC \(U10\), AP3406KT is added for Ethernet switch \(U9\), RTL8363NB.](#)
6. [Flash IC \(UM11\) is changed from W29N01HVSINF to S34ML01G200TF100.](#)
7. [DDR3 \(UM9\), EM6GC16E is changed to W631GU6NB-12.](#)
8. [RESET IC \(U17\), TPS3103E15DBVT is added.](#)
9. [Adding an alternative AC adaptor \(100-240VAC 50/60Hz 0.3A to 5VDC 2.0A 10.0W, Model: NBS12E050200UV, Brand: MASS POWER\)](#)

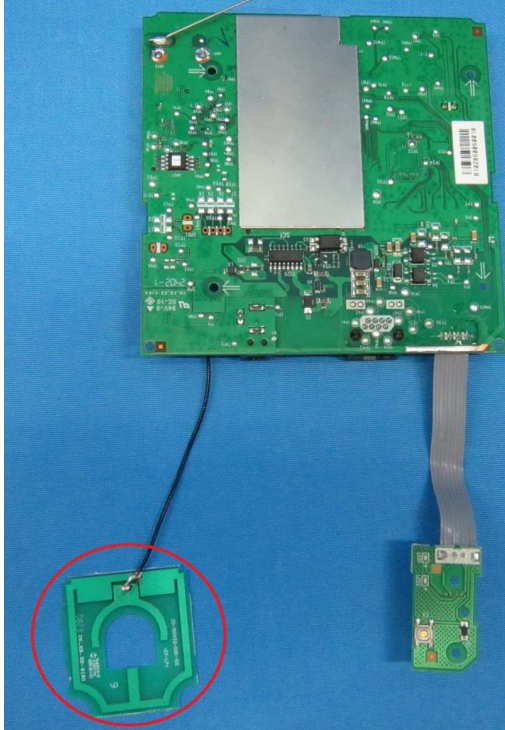


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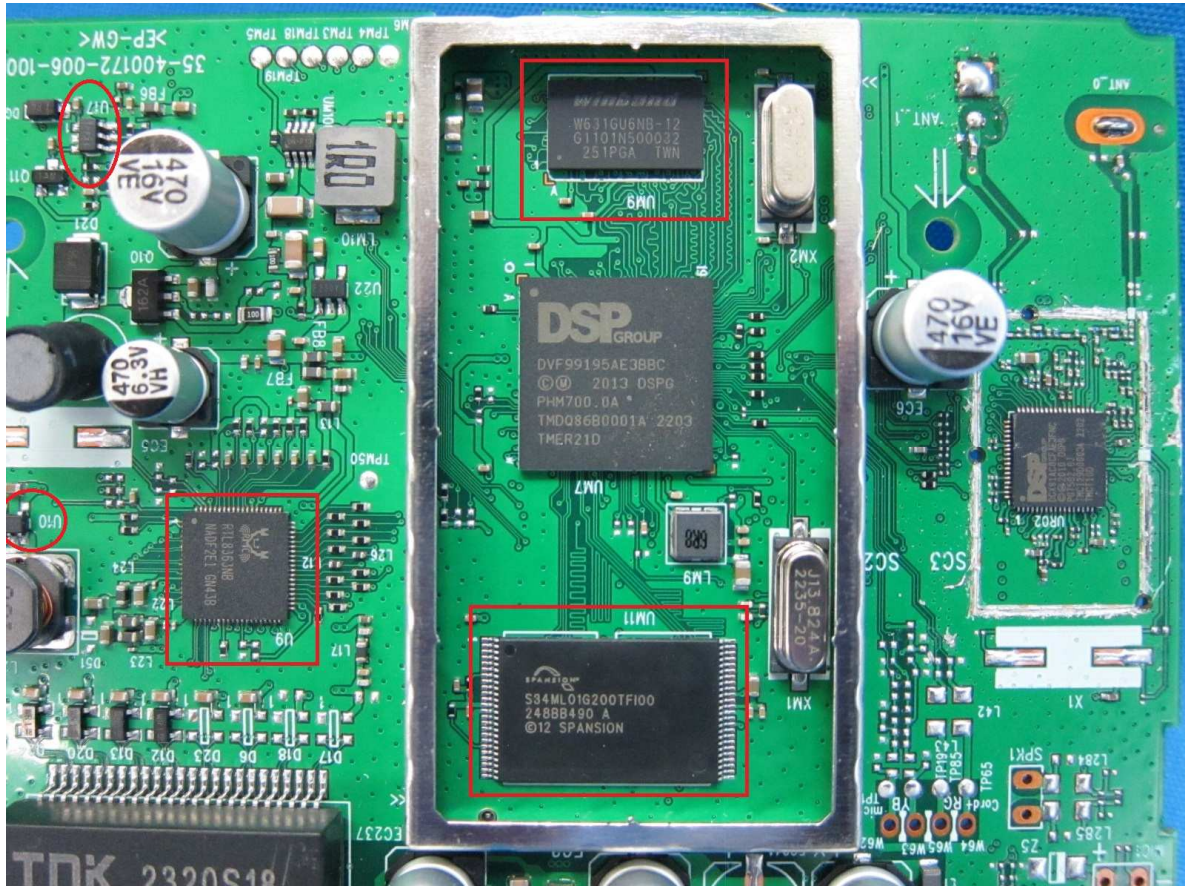
KeyPCB



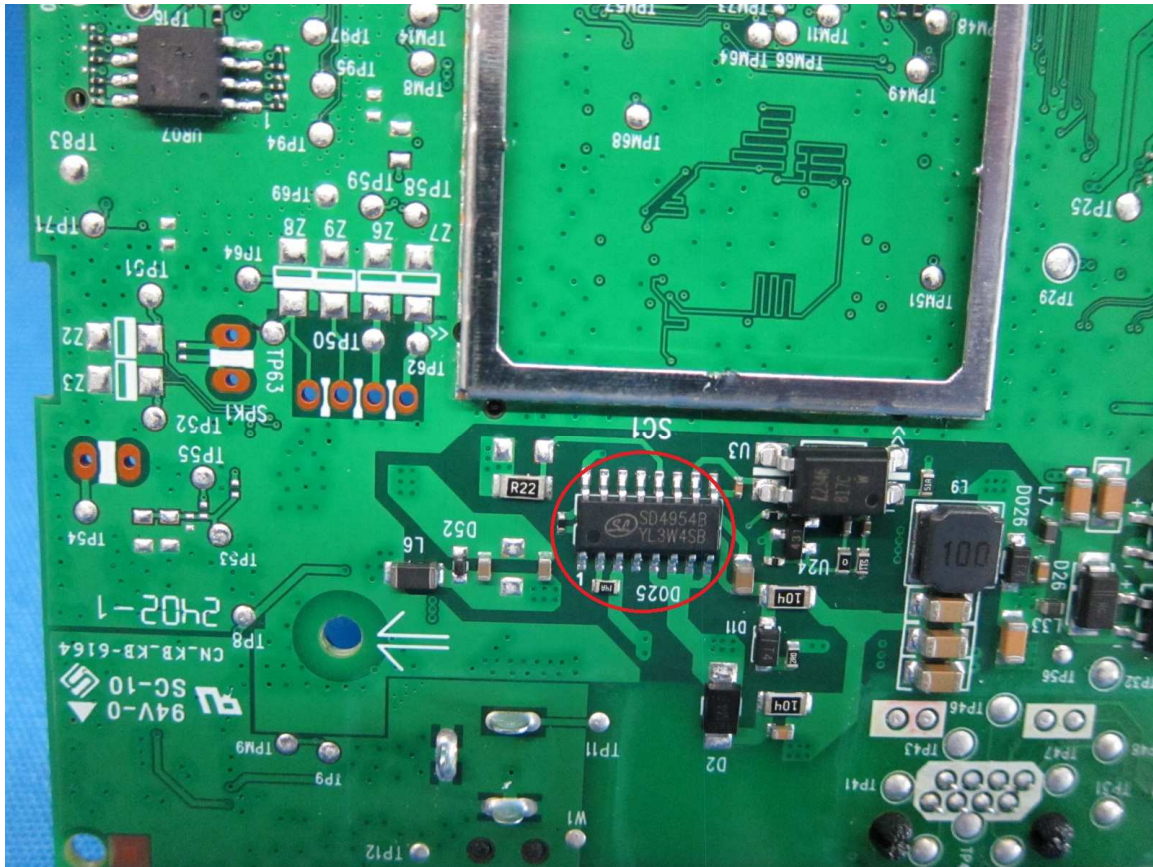
Internal vertical PCB loop antenna



Main PCB front side



Main PCB bottom side



Similarities of Base Unit between the original models to the new designed models:

1. RF IC/RF circuit /RF PCB layout are the same.
2. No change in radio parameters has occurred.
3. RF conducted and radiated emission level is similar.
4. RF Module – Same.
5. Horizontal mono pole antenna – Same.

Sincerely,



Michael Tsui
Approbation Supervisor