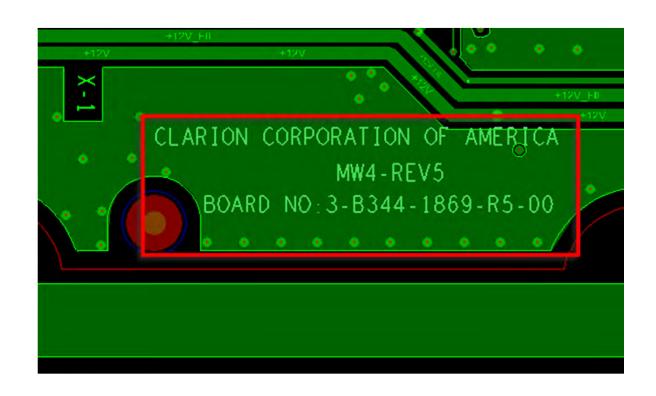
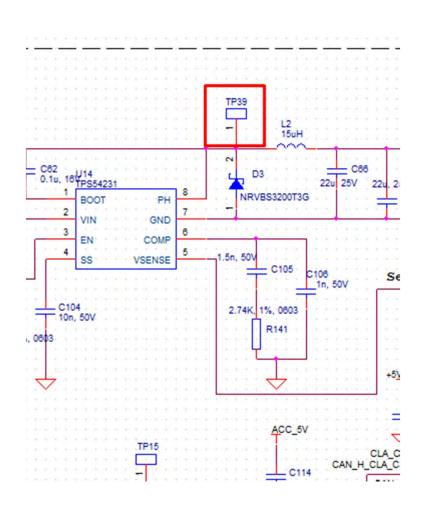
#### CMS5 – MW4 CHANGES

## 1.PCB Info Revision No Updated Silk Top and Removed from Copper

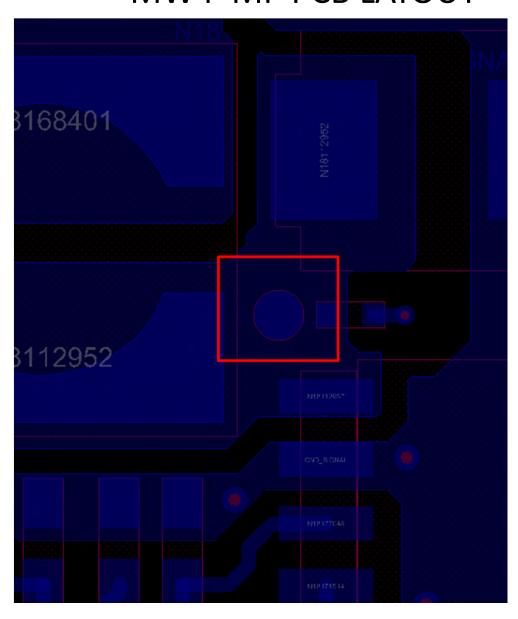


#### 2. Newly Added Test point (TP39) in MP Revision

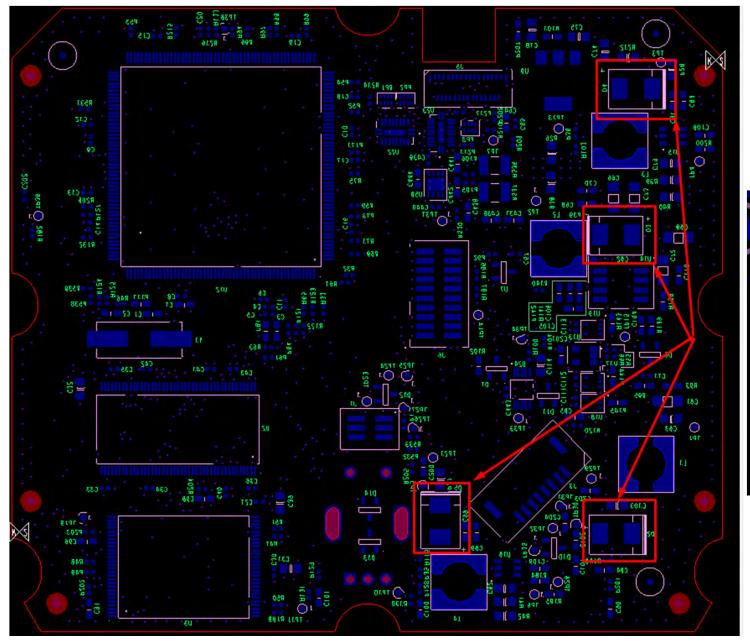
#### MW4 MP SCHEMATIC



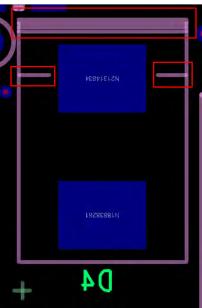
#### MW4 MP PCB LAYOUT



### 3.Diode Silk Screen Updated(No Copper Change) MW4 MP PCB LAYOUT



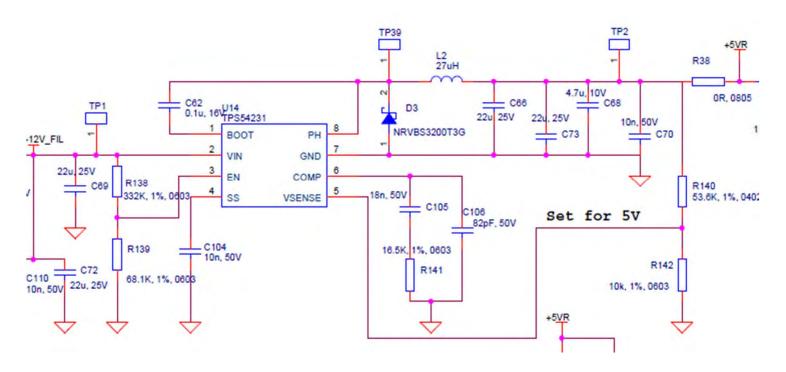
DIODE FOOTPRINT



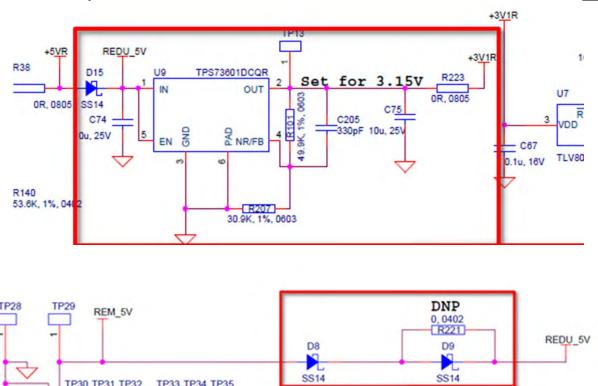
#### 4.LED Pad Size & Silk Screen Updated



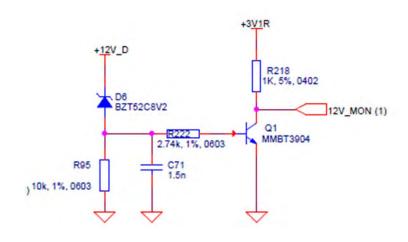
### 4. Main switching power supply reconfigured to 5V (from 3.15V)

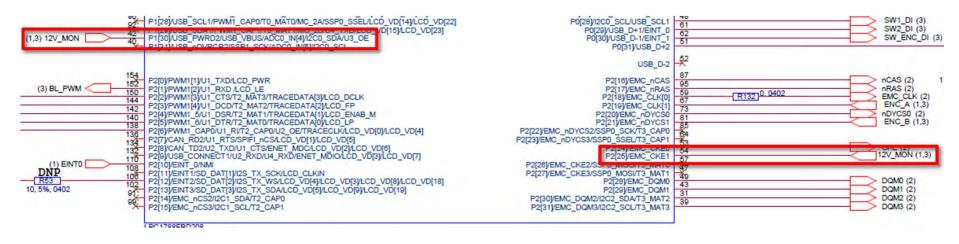


## 5. LDO - NCV1117STAT3G replaced with new part TPS73601DCQR and configured for 3.15V (from 5V). Now the LDO can be power either from 5V Switcher or 5V\_STBY

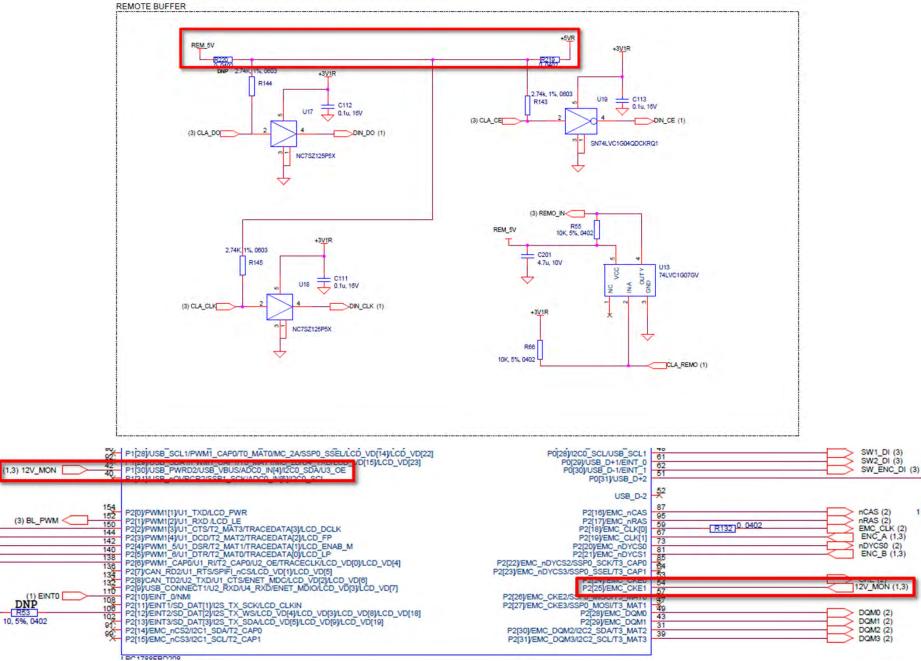


# 6. Battery analog voltage measurement replaced with a interrupt circuit to switch to low power mode when 12V is turned of during sleep mode

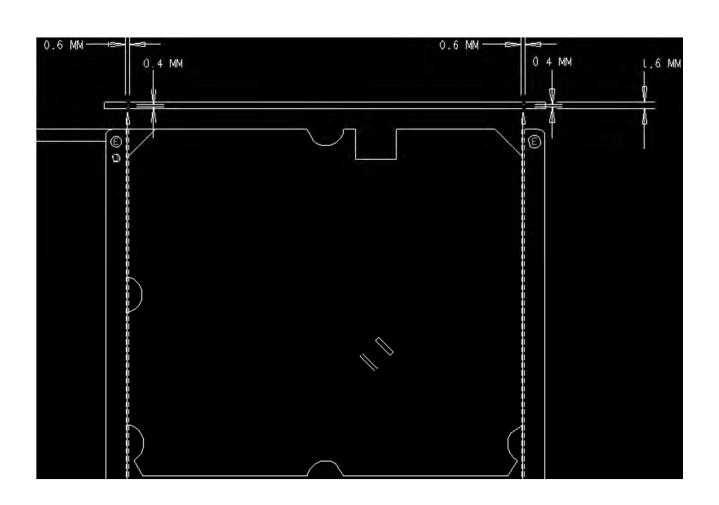




#### 7. CMD6 for MW4 backward compatibility Changes (Schematic)



### 8. Panel Changed - V-Cut groove added to break the side PCB strips

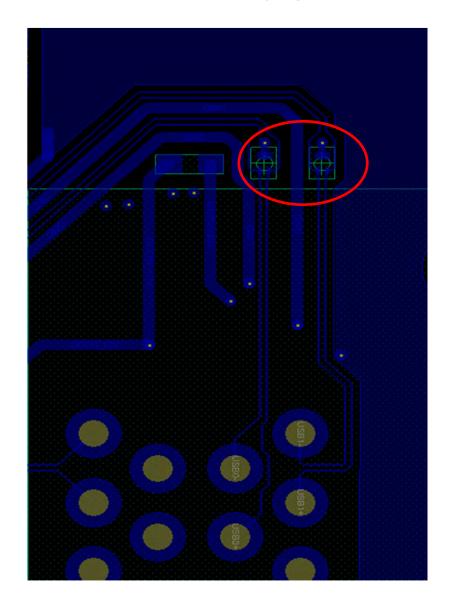


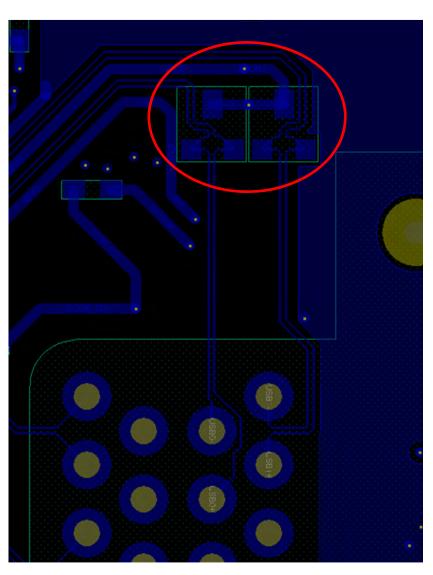
### CMS5 – BB CHANGES

1. D1,D2,D7 &D8 (SOT-883) are Replaced with SOT 23-3 Package.

**BB PP VERSION** 

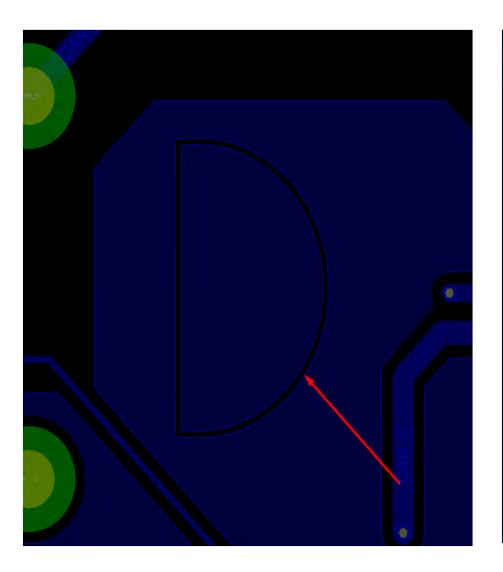


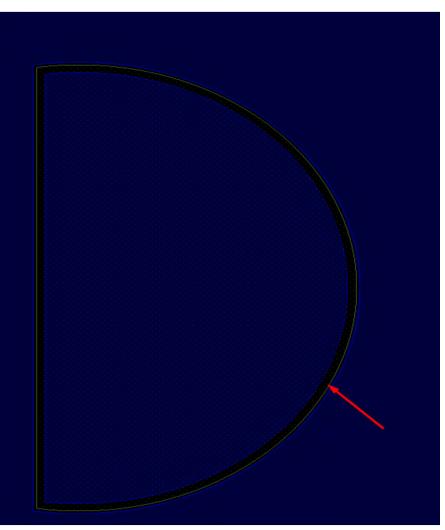




#### 2. Solder Mask Opening for Copper Thieving Pads.

**BB PP VERSION** 





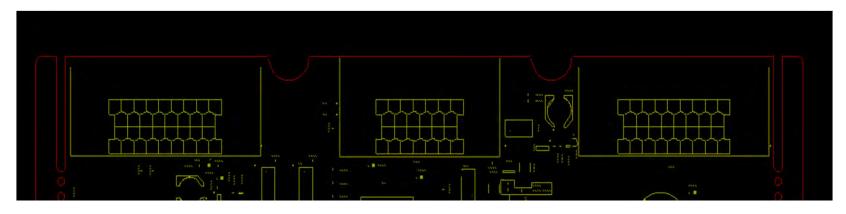
### 3. PCB Information Updated in Silkscreen and removed from Top and Bottom Copper.

TOP SILKSCREEN LAYER



4. Silkscreen for Connectors Updated in bottom side.

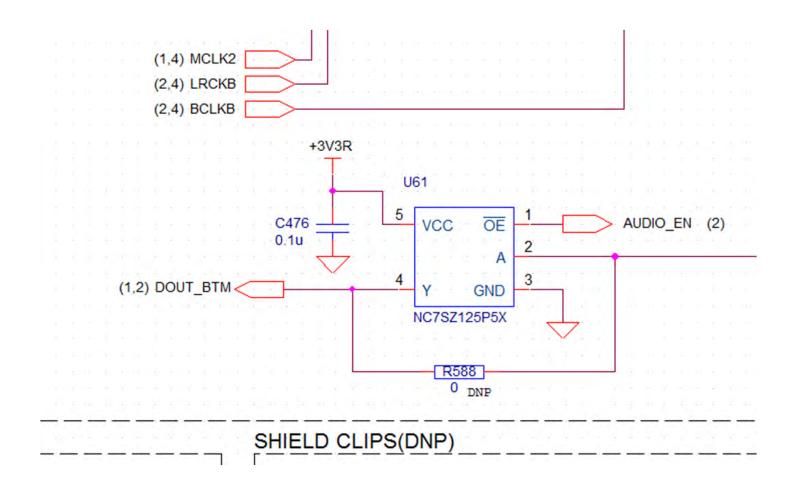
BB PP VERSION (silkscreen on top)



BB MP VERSION (silkscreen on bottom)

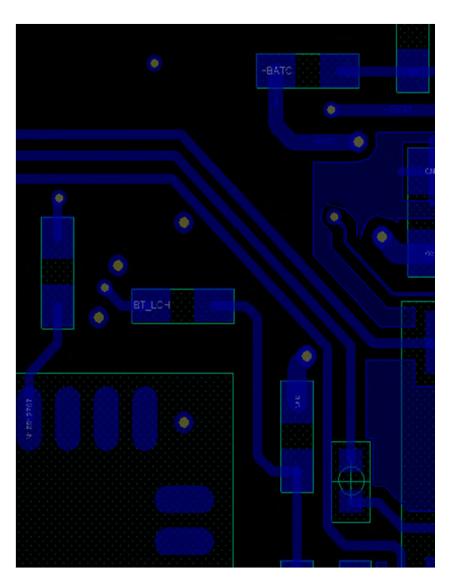


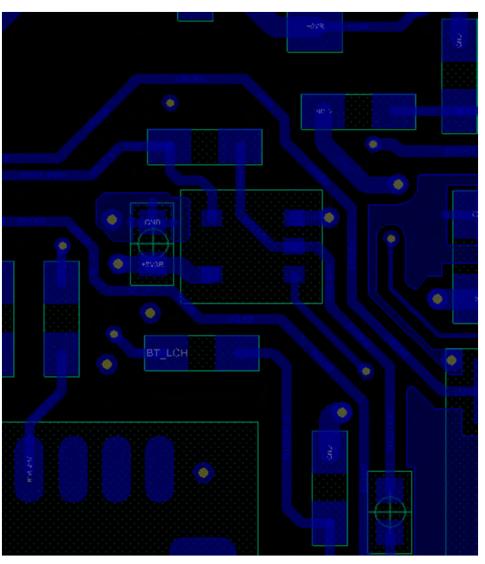
#### 5. Buffer Circuit Added Near BT Module.



#### 5. Buffer Circuit Added Near BT Module.

#### **BB PP VERSION**

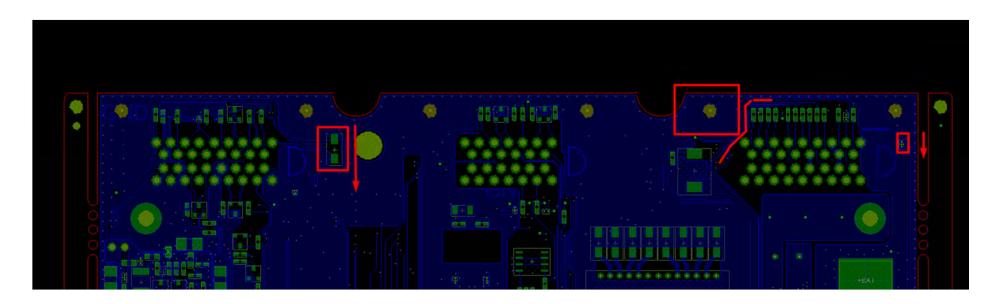




#### 6. CN1,2&3 NPTH Clearance in Solder Side.

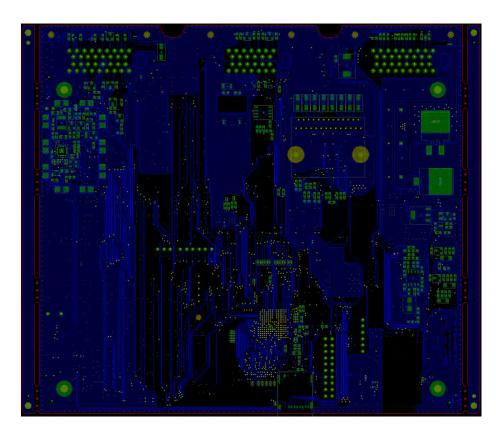


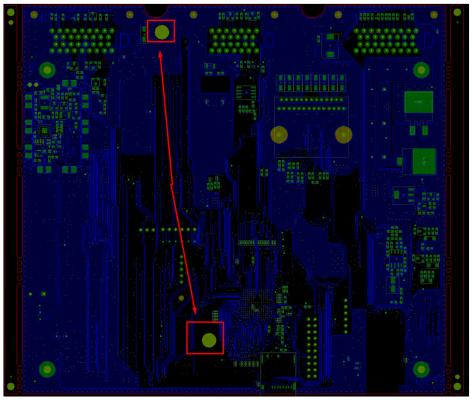
**BB PP VERSION** 



7. Locating Holes added for Assembly Purpose.

**BB PP VERSION** 

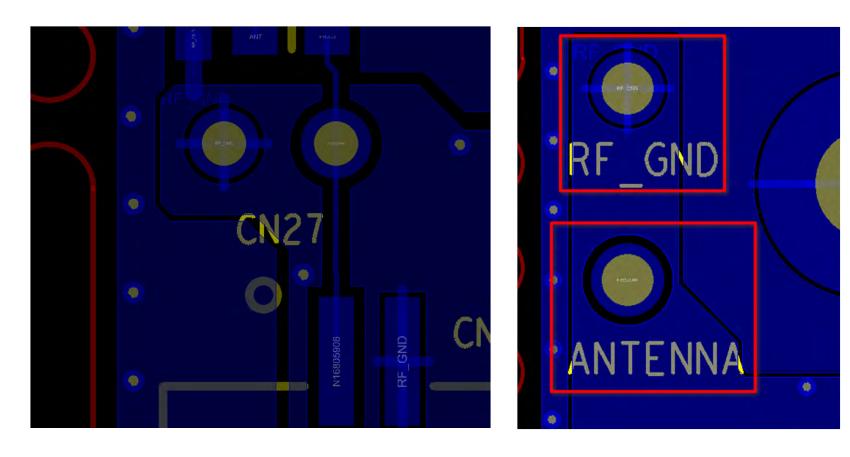




8. Silk Screen Added for Antenna Pins both top and bottom side(Top Side).

**BB PP VERSION** 

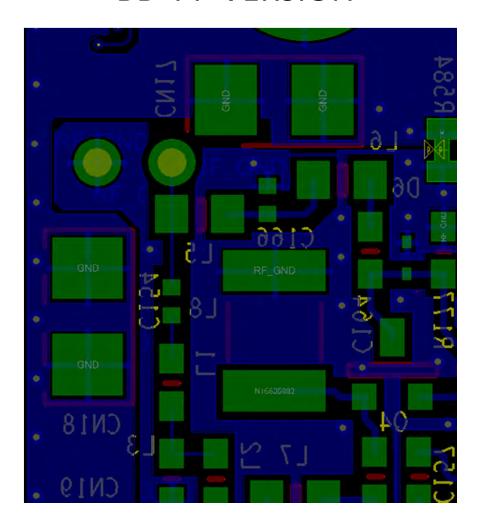
**BB MP VERSION** 

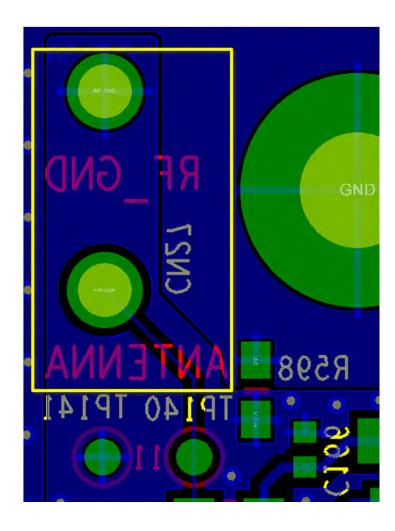


CN17 & CN20 Is removed from Schematic CN27 Is rotated by 90 moved away from L5 to avoid Selective Soldering issue

8. Silk Screen Added for Antenna Pins both top and bottom side(Bottom side).

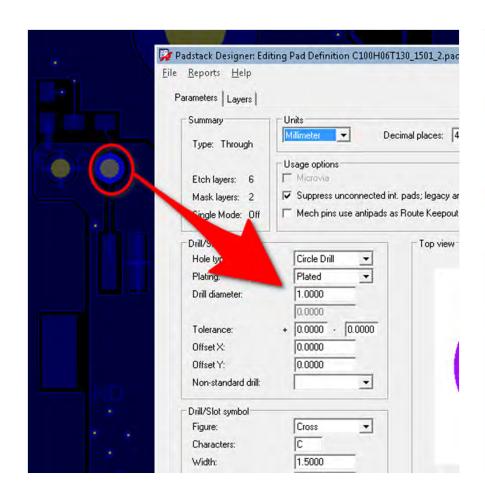
**BB PP VERSION** 

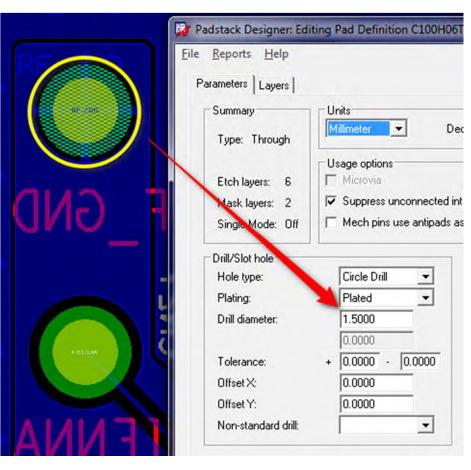




### 9. Through hole size of the Antenna Pigtail is increased from 1mm to 1.5mm

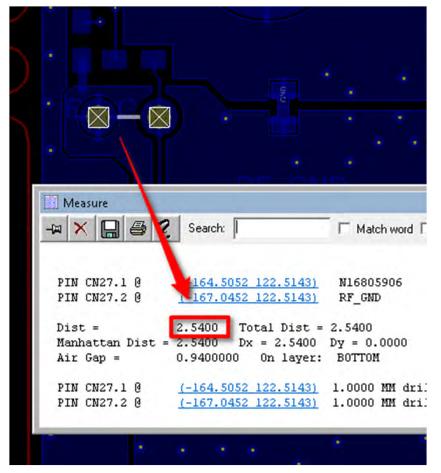
**BB PP VERSION** 

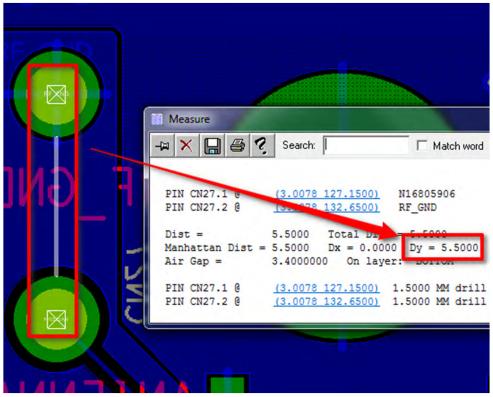




## 10. Pitch oh through hole Antenna Pigtail is increased from 2.54mm to 5.5 mm

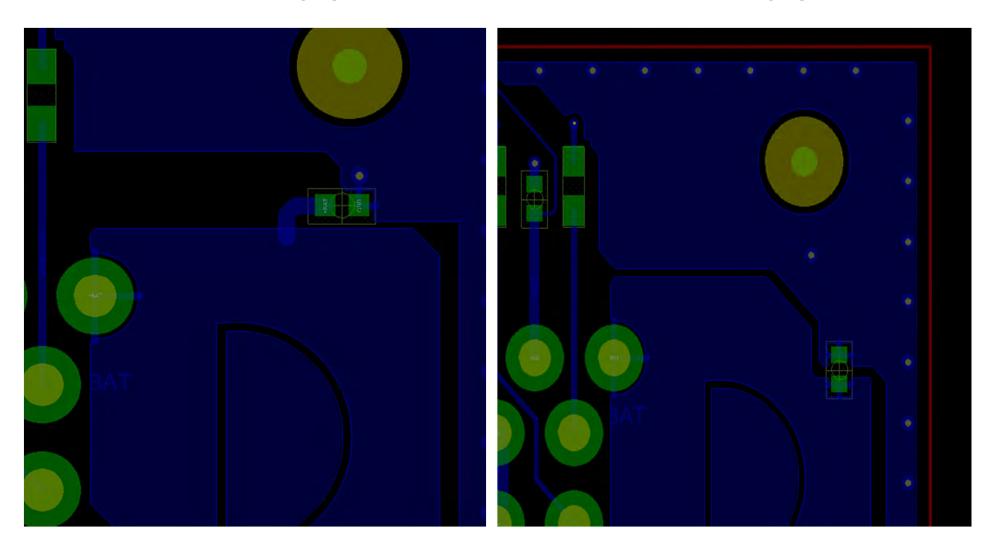
BB PP VERSION BB MP VERSION



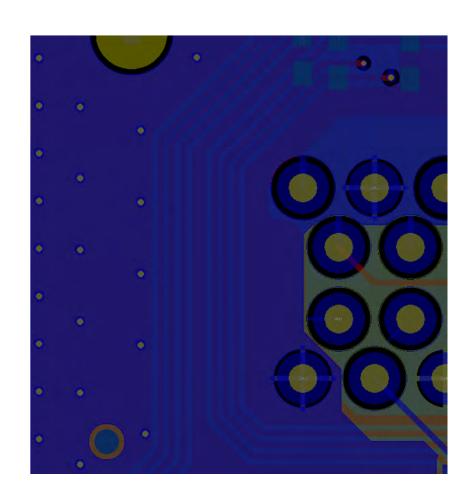


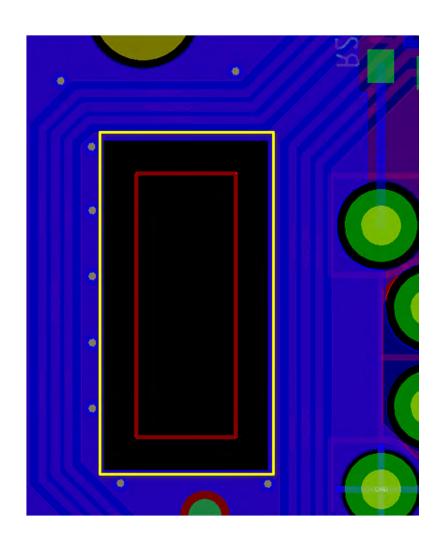
#### 11. C347 Moved Away from CN1 NPTH hole.

**BB PP VERSION** 

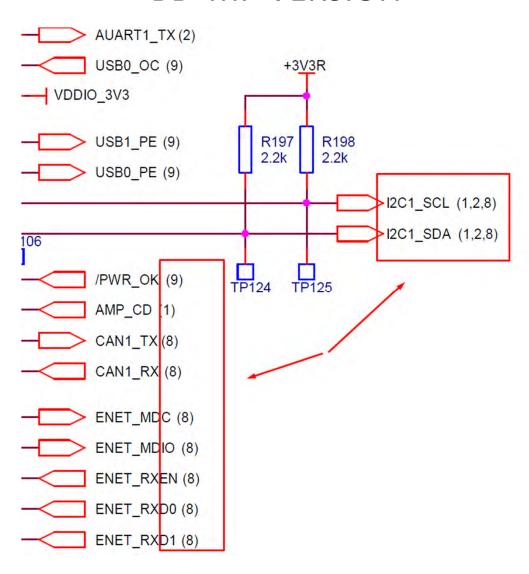


## 12. PCB slot is Introduced for Antenna Pig tail BB PP VERSION BB MP VERSION



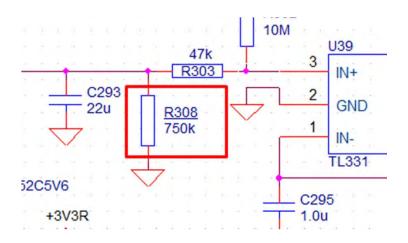


#### 12. Inter sheet Reference for Off Page Connector Pins.



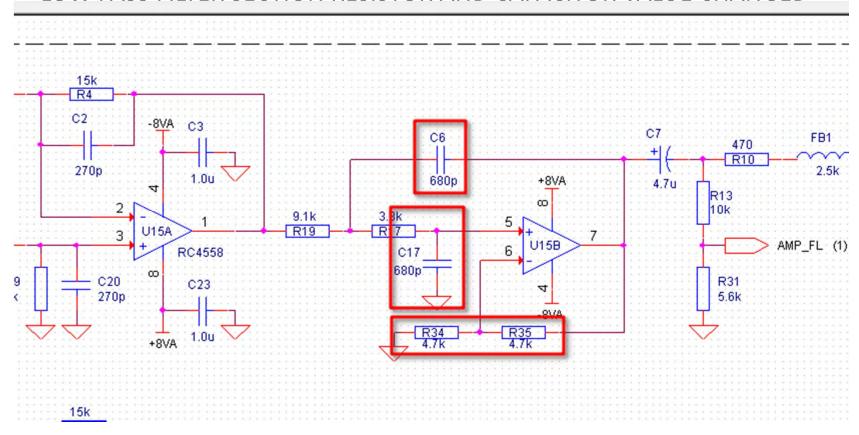
#### 13. Schematic Changes (BOM Change).

Power down timing resistor changed to 750Kohm



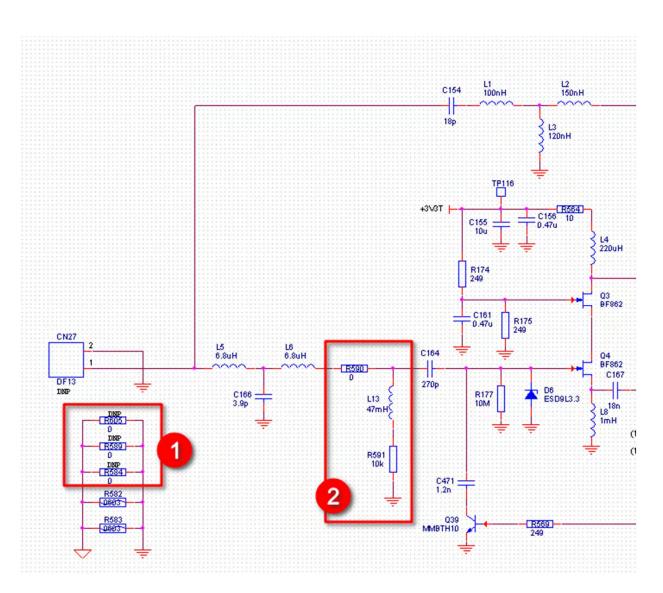
#### 14. Schematic Changes (BOM Change).

#### LOW PASS FILTER SECTION RESISTOR AND CAPACITOR VALUE CHANGED



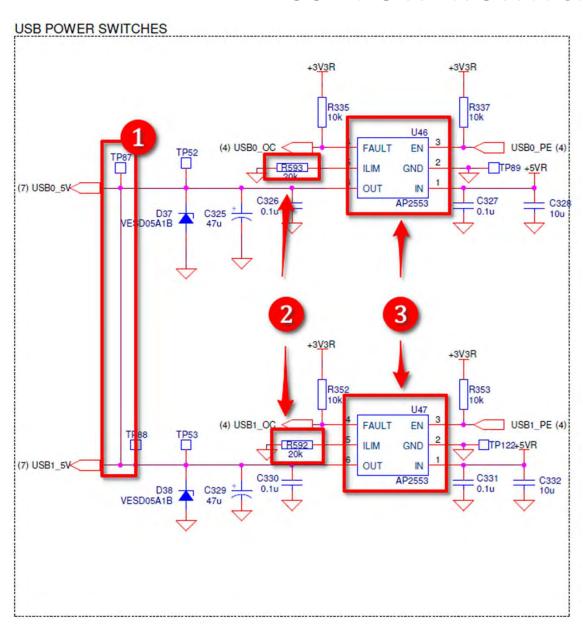
Resistors (R34,R35,R70, R71,R100, R101,R122, R123,R36, R37,R72, R73,R102, R103,R434, R435)changed from(5.6K&3K) to 4.7K Capacitors (C6, C17,C30,C41,C53, C65,C73, C79,C8, C21,C33, C43,C57, C66,C368, C410) changed from (820P&470P) to 680P

### 15. Schematic Changes. AM/FM/WB TUNER



- 1. 0 Ohm resistor are newly added (R584,R589,R605).
- 2. Main strap circuit added newly.
- 3. SMD connector CN20 is removed from the design
- 4. R584 Resistor direct short removed.
- 5. R577 &R578 is removed from the design.
- 6. Sheild clip CN17 is removed from the design.

### 17. Schematic Changes. USB POWER SWITCHES

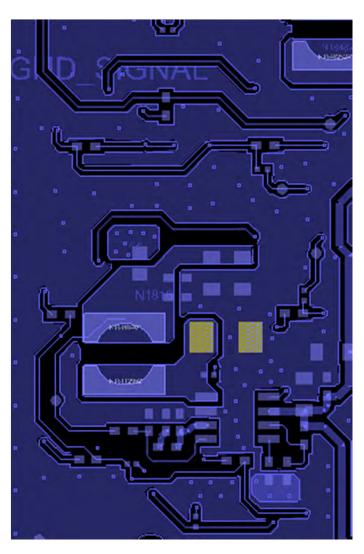


- Both USB Supplies Shorted.
- 2. R593 & R592 is newly added
- 3. U46 & U47 Part is changed from AP2191 To AP2553.

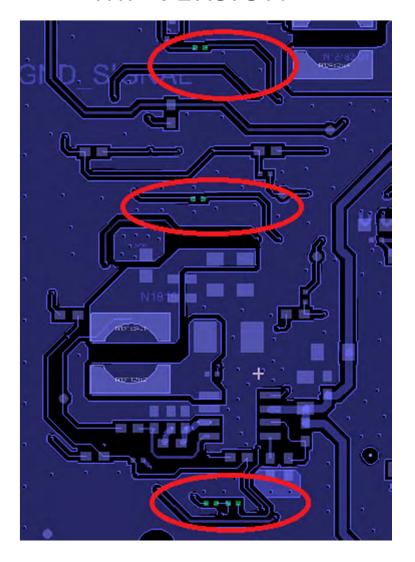
#### CMS5 – DC CHANGES

1. 4 Series resistors added accords to TOP switch LEDs to reduce the Current and brightness. (Resistor Values to be finalized to

**BB PP VERSION** 



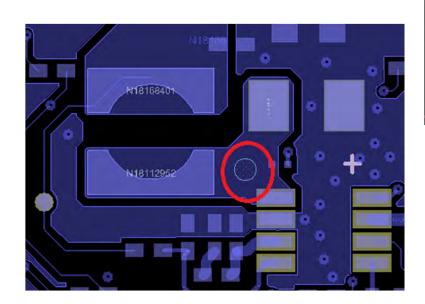
#### MP VERSION

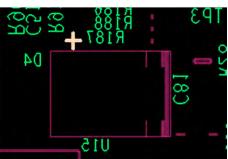


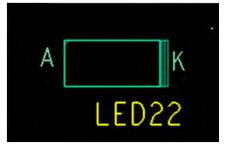
Test-point added at switching Node of 3V3 Power Supply. (No copper Change)

Diode and LED Silk screen modified (No copper Change)

Rev No Updated (No copper Change)

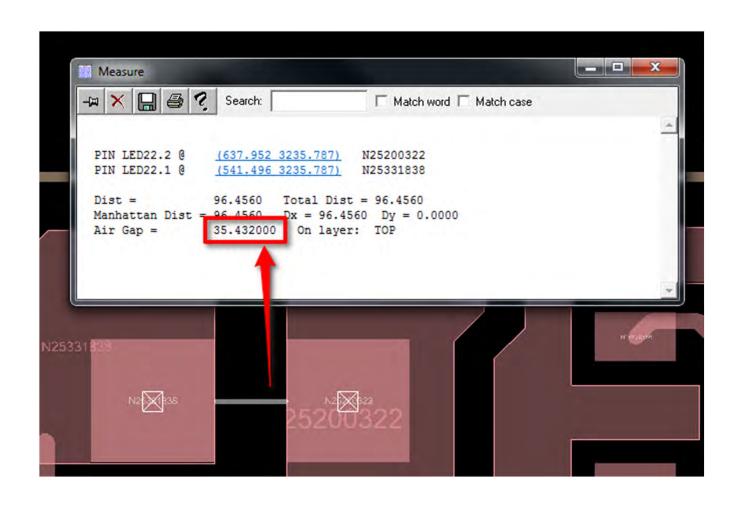








#### LED foot print updated to accommodate various footprints



#### Panel changed to have V-cut for side trips as per Skypine request

