RTL8186 V110A Hardware Reference Design Release Note

Date: July 14, 2006

The modifications are for the EMI performance enhancement and the changes or the differences between V110 & V110A are as below:

1. Mount L131, L117, L118.
2. Change R11, near the 40M crystal, to a 20-pF capacitor, C292.
3. Add 4 20-pF capacitors, C288, C289, C290, C291 between the serial RF control pins and the ground. Please notice that the 4 capacitors addition are not modified in pcb and gerber files which are still of V110 design. You need to add them to your pcb design and gerber files by your own. And now we placed these 4 capacitors on the backside of the board and they are close to the RF transceiver, RTL8225-VF. Realtek will provide a new pcb and gerber files soon that the 4 capacitors placed on the upside.
4. Remove RV1, RV3, RV5 capacitors near Ethernet jacks.
5. Replace L5, L4, L29, L12 and L11 by 0-Ohm resistors, R343, R341, R340, R339 and R342 respectively.
6. Add the LED, D4, and its glue logic for Realtek wireless EasyConfig operation. But the modification is not involved in the PCB and gerber file. Realtek will soon update this to the new PCB and gerber files.

Above changes are also highlighted in BOM Excel file in the red ink.