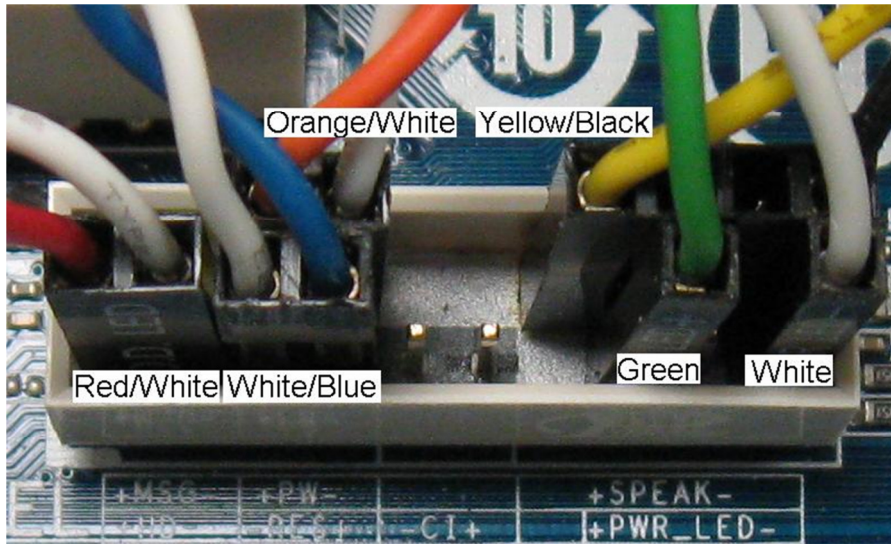# CTS1132 Lab 5.1: Build a Custom PC

Items needed

1. Tool kit with anti-static strap
2. Custom PC case
3. Custom PC tub

In K-09

1. Open the Custom PC tub. Using the Custom PC Checklist, inventory the contents.
2. Notify the lab assistant of any missing or damaged contents.
3. Have lab assistant initial the Custom PC Checklist.
4. Have the lab assistant initial here _____.
5. Review the case manual.
6. Review the power supply manual.
7. Review the motherboard user's manual.
8. Put the case on the anti-static mat.
9. Put on anti-static strap.
10. Open case and make sure the standoffs are in the correct location for the motherboard and tighten.
11. Install the I/O shield.
12. Carefully remove the motherboard out of the anti-static bag being careful to avoid ESD (handle by the edges and don't touch motherboard components.
13. Install the motherboard over the standoffs and snug against the I/O shield.
14. Screw down the motherboard snug but **DO NOT OVER TIGHTEN**.
15. Install the power supply.
16. Attach the power supply's motherboard connectors (20+4pin main connector and ATX 4pin connector.
17. Make sure the CPU fan is properly connected (manual pg. 14, item 3/4).
18. Attach the case fan (manual pg. 14, item 3/4).
19. Connect the Front panel header connections, see image below (manual pg. 16, item 8).

20. Connect the Front panel audio header connections (manual pg. 17, item 9).
21. Connect the USB header (manual pg. 18, item 12).
22. Install SATA HDD. Attach power and data cable.
23. Install SATA DVD ROM drive. Attach data cable. Attach molex to SATA adapter to molex power connector and attach power to drive.
24. Attach SATA data cables to SATA connectors on motherboard.
25. Have lab assistant initial here _____.
26. Power on the PC and listen for beep code(s).
27. Troubleshoot any errors.
28. When there are no errors, have lab assistant initial here _____.
29. Carefully (do not rip cables off) disassemble the PC and return all parts to the Custom PC tub.
30. Using the Custom PC Checklist, inventory the contents.
31. Notify the lab assistant of any missing or damaged contents.
32. Have lab assistant initial the Custom PC Checklist and return the Custom PC tub.
33. Put the case together and place under repair station.
34. Return the tool kit.
35. Have the lab assistant initial here _____.
36. Hand in this sheet to the instructor.