3.3.4 Motherboard Installation Facts

Repairing a motherboard is beyond the skill of most technicians and it is almost always cheaper and faster to purchase a new one. You might also need to replace your motherboard to add new features or to upgrade the processor. Use the following process when installing or replacing a motherboard:

1. If you are replacing an existing motherboard, document the current CMOS settings. You might need these settings to configure the new motherboard.
2. Install the CPU, heat sink, and memory before installing the motherboard in the case.
3. Insert the I/O shield into the case.
4. Fasten standoffs to the case, being sure to match the hole pattern on the motherboard. The standoffs prevent the motherboard circuits from touching the system case.
5. Install the motherboard, securing it to the standoffs with insulated washers and screws.
6. Connect the power and accessory cables:
   - Connect the ATX power cable and the CPU power cable.
   - Connect the CPU fan power cable.
   - Connect case wires (e.g., power switch, reset switch, and drive activity and power lights).
   - Connect any case fan cables.
7. Connect drives to SATA connectors.
8. Install additional devices in expansion slots.
9. Connect wires for front/top panel ports (e.g., USB, audio, or eSATA).
10. Document the settings of the new motherboard.

    Consult the motherboard's documentation to identify the location and configuration of front/top panel ports and case wires.