Simplify the notebook LED design

Conventional approach:
Currently, the notebook has two LED to indicate system power state and AC adapter/battery charge status. User can based on the LED status to know the notebook power status.

Please refer below pictures,

- Power LED
  - Turn on when system is in “power on” mode.
  - Blinking when system is in “standby” mode.

- AC-in LED
  - Turn on as white color to indicate the system is attached AC adapter but the battery not in “charging” mode.
  - Turn on as amber color to indicate the battery is in “charging” mode.
  - Blinking white color when battery capacity less than 10%.

New approach:
We can remove the AC-in LED and use the power LED to indicate the adapter/battery status. New Power LED behavior as below, only turn on either white or amber LED.

- White color (battery not be charged)
  - Turn on when system is in “power on” mode.
  - Blinking when system is in “standby” mode.

- Amber color (Battery is under charging)
  - Turn on when system is in “power on” mode.
  - Blinking when system is in “standby” mode.
Below is the benefit for this invention:

- Simply the system LED design (Reduce the AC-in LED, cost saving).
- User still able to check the system power LED to know if AC adapter plug-in / battery in charging mode or not.

Block diagram for this invention:

<table>
<thead>
<tr>
<th></th>
<th>White color</th>
<th>Amber color</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LED on</td>
<td>LED Blanking</td>
</tr>
<tr>
<td>System power on</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>System in standby mode</td>
<td></td>
<td>V</td>
</tr>
<tr>
<td>Battery in charging mode</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No matter system on or off</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Battery in charging mode and system in standby mode</td>
<td></td>
<td></td>
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</tbody>
</table>

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