













Green Power LED function:

When system is switched on capacity draws gate of green LED to GND.  
Thus FET is off and LED\_PWgmn is high and green LED is on.

During startup LED\_PWRred is high impedance pulled up by Broadcom  
and pulled down by 1k.  
Thus FET is off and LED\_PWgmn is high and green LED is on.

After booting Broadcom changes LED\_PWred to output low.  
Thus FET is off and LED\_PWgmn is high and green LED is on.

On severe error Broadcom sets LED\_PWred to output high.  
After charging Capacitor to 1.5 V FET will turn on (max. 1 s delay).  
Thus LED\_PWgmn is low and green LED is off.  
This mode pulls  $2 \times 3.3V/1k = 6.6 \text{ mA}$  current.

On fault condition Braodcom sets LED\_PWred to 1Hz high / low  
oscillation.  
After charging Capacitor to 1.5 V (during high phase) FET will turn on.  
Discharge during low phase of LED\_PWred is much slower and  
capacitor is not discharged.  
Thus LED\_PWgmn keeps low and green LED stays off.  
LED turns on again when LED\_PWred is low for more than 3 seconds.



