



**Design assumptions:**  
- CC battery: 400mAh, charge @ 0.5-0.6C  
- Monocle current draw:  
  >= 2mA for pre-charge  
  < 200mA bulk charge  
  < 4mA when charging done

**Firmware to prevent discharging the battery:**  
- Timer: turn on boost every 1 second  
- Wait TBD ms to settle, measure current.  
- If current > threshold, Monocle is present, leave Boost on  
- If current < threshold, turn boost off after TBD ms.  
- If VBAT+ voltage < 3.2V, keep Boost off

Copyright 2022 © Brilliant Labs Ltd Schematic licensed under: CERN-OHL-P v2	
Engineer: V. Rangan (venkat@itsbrilliant.co) <b>Brilliant Labs Ltd.</b>	
Sheet: / File: CC8.kicad_sch	
<b>Title: Monocle - Charging Case</b>	
Size: A4	Date: 2022-08-23
KiCad E.D.A. eschema (6.0.10-0)	Rev: 8 Id: 1/1