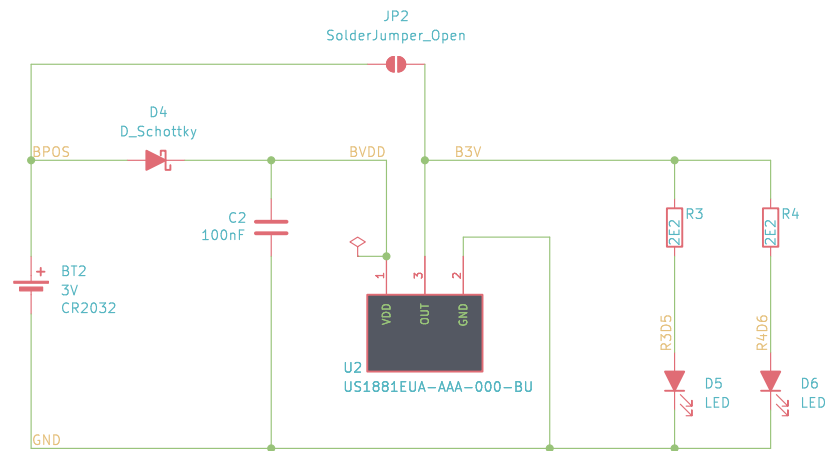


#### NOTE:

1. For a basic version, do not populate (DNP) D1 and U1 and bridge jumper JP1.
2. Use one CR2032 coin cell to operate circuit at 3V
3. Use 2E2 for R1 and R2.
4. For a fancy version, populate D1 and U1, and do not bridge jumper JP1.
5. Use two CR2016 coin cell to operate circuit at 6V
6. Use 270E for R1 and R2.

#### SPECIAL NOTES FOR US1881 (U1)

7. The US1881 is a magnetic hall sensor "latch".
- The "north" pole of a magnet turns its output low, and the "south" pole of the magnet turns its output high.
7. For U1, ensure gap (lead length) of atleast 2.5 mm / 0.1 " from PCB
8. The US1881 has a min operating voltage of 3.5V – hence using two 2016 cells in series to get 6V
9. The US1881 is also sensitive to reverse voltage – hence the series protection diodes



Badge – learn to solder + learn to lasercut  
**hackPGH**

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#### Title: **hack\_badge**

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