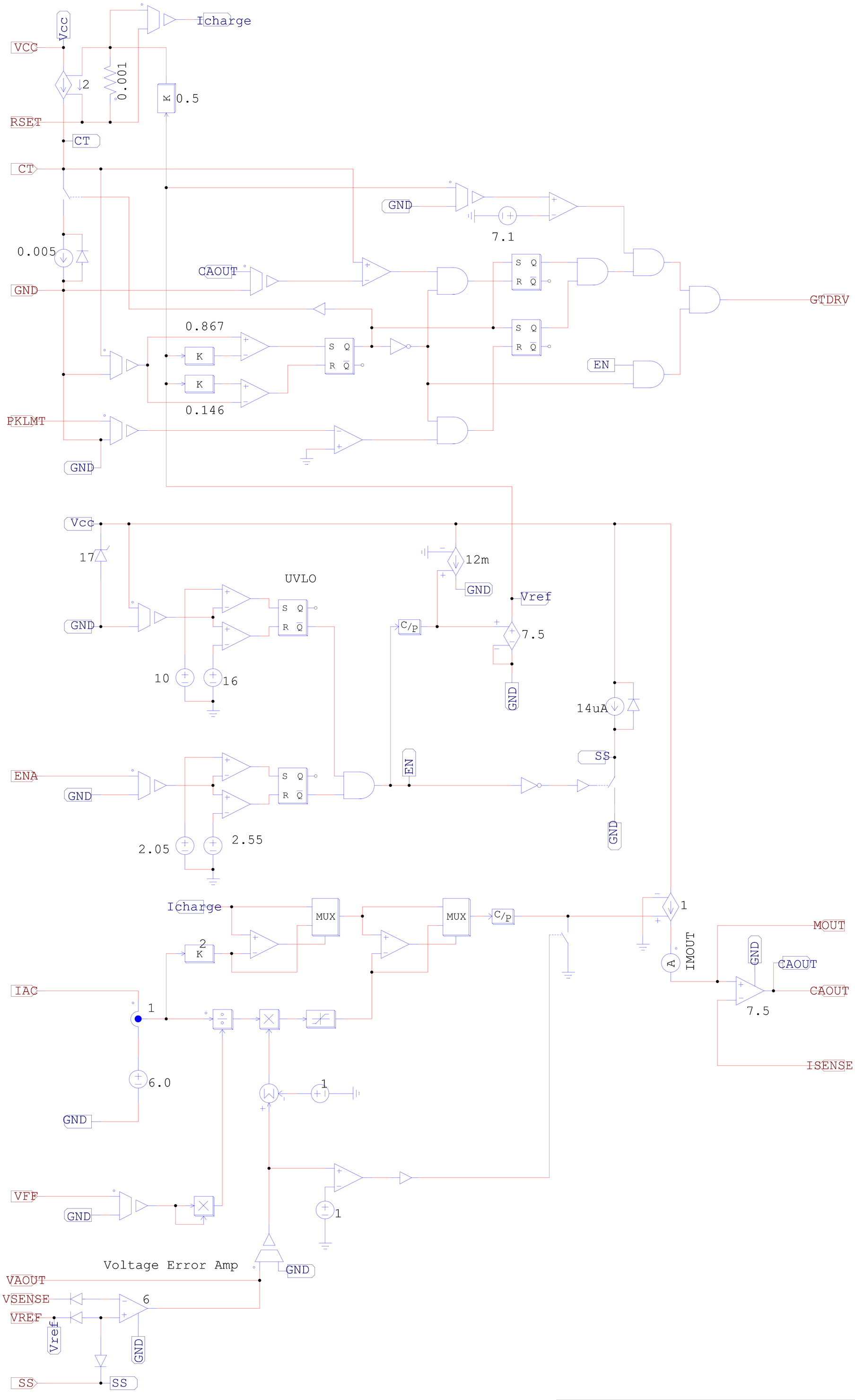
# Model for UC3854A

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DIL-16, SOIC-16W (TOP VIEW)
J, DW or N Package

| | |
|---|---|
| 1: GND | 16: GTDRV |
| 2: PKLMT | 15: VCC |
| 3: CAOUT | 14: CT |
| 4: ISENSE | 13: SS |
| 5: MOUT | 12: Rset |
| 6: IAC | 11: VSENSE |
| 7: VAOUT | 10: ENA |
| 8: VFF | 9: VREF |

Note:

- All functions of the IC are modelled, including the Vcc UVLO, IC enable, peak current limit and soft start
- The propagation delay is not modelled. It can be included by adding time delay blocks (TDELAY) at the gating output.
- This model applies to UC1854A (Ta = -55 oC to 125 oC), UC2854A (Ta = -40 oC to +
  and UC3854A (Ta = 0 oC to +70 oC)
- After modifying the UVLO threshold, the model can also be used for UC3854B
  The differences between UCx854A and UCx854B are:

| | UVLO On/Off |
|---|---|
| UCx854A: | 16.0V / 10.0V |
| UCx854B: | 10.5V / 10.0V |

- A voltage sensor is used to measure the node voltage with respect to the IC reference (GND) in many places. This is needed since the IC reference GND may be floating and the power ground is elsewhere. Without the voltage sensor, the node voltage with respect the power ground, not the IC reference, will be measured and used instead.
- A grounded op. amp. (OP_AMP) can be used for the error amplifier if the IC reference ground is connected to the power circuit ground.

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85 oC)

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