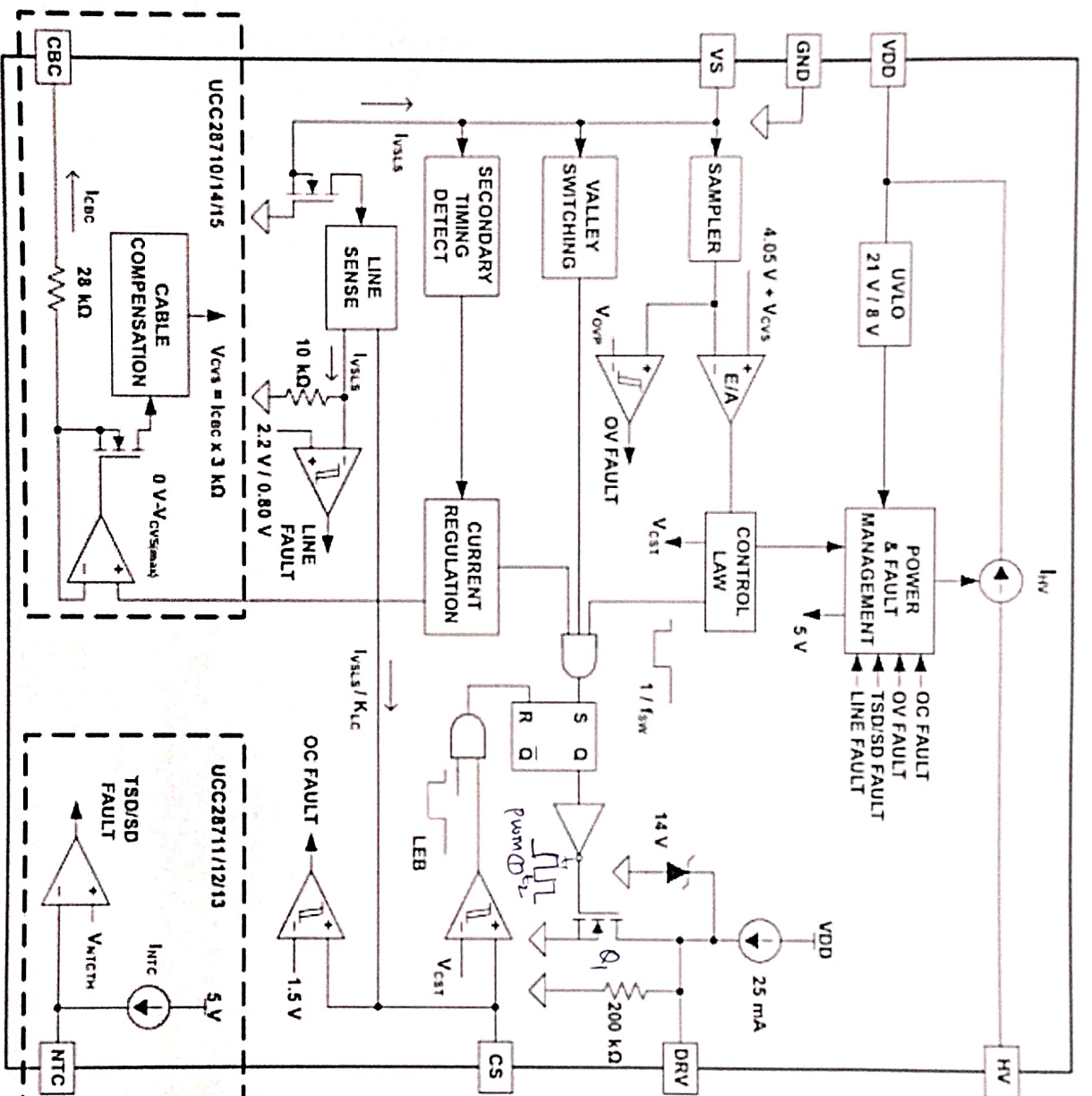
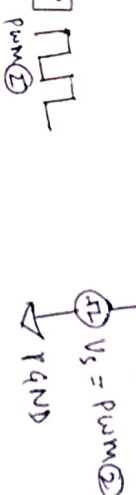
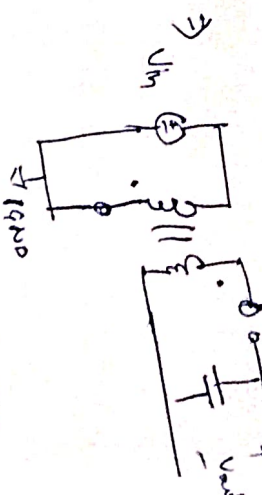
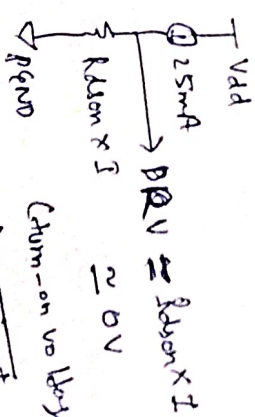




Explanation: why connecting directly to transformer primary winding for DRV pin will not work for $V_{in} > 14V$.



during t_1 duration of P_{DRV} and Q_1 will get turn-on and constant ckt —

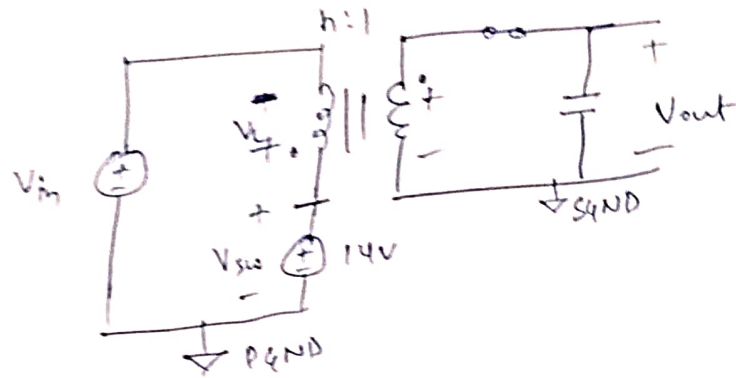


→ Very high primary side p/c current will flow & may damage controller.

case ③

during t_2 duration of PWM ① —

$Q_1 \rightarrow \text{off}$, 25mA current will flow through 14V Zener diode and will clamp DRV pin voltage to 14V. But —



Here as DRV pin will try to clamp its voltage to 14V but during this time reflected voltage across primary winding will be nV_{out} and voltage at node ~~to~~ DRV pin will keep increasing (during leakage reset duration) and can go $> V_{in} + nV_{out}$, which may lead to catastrophic failure of MOSFET Q_1 .