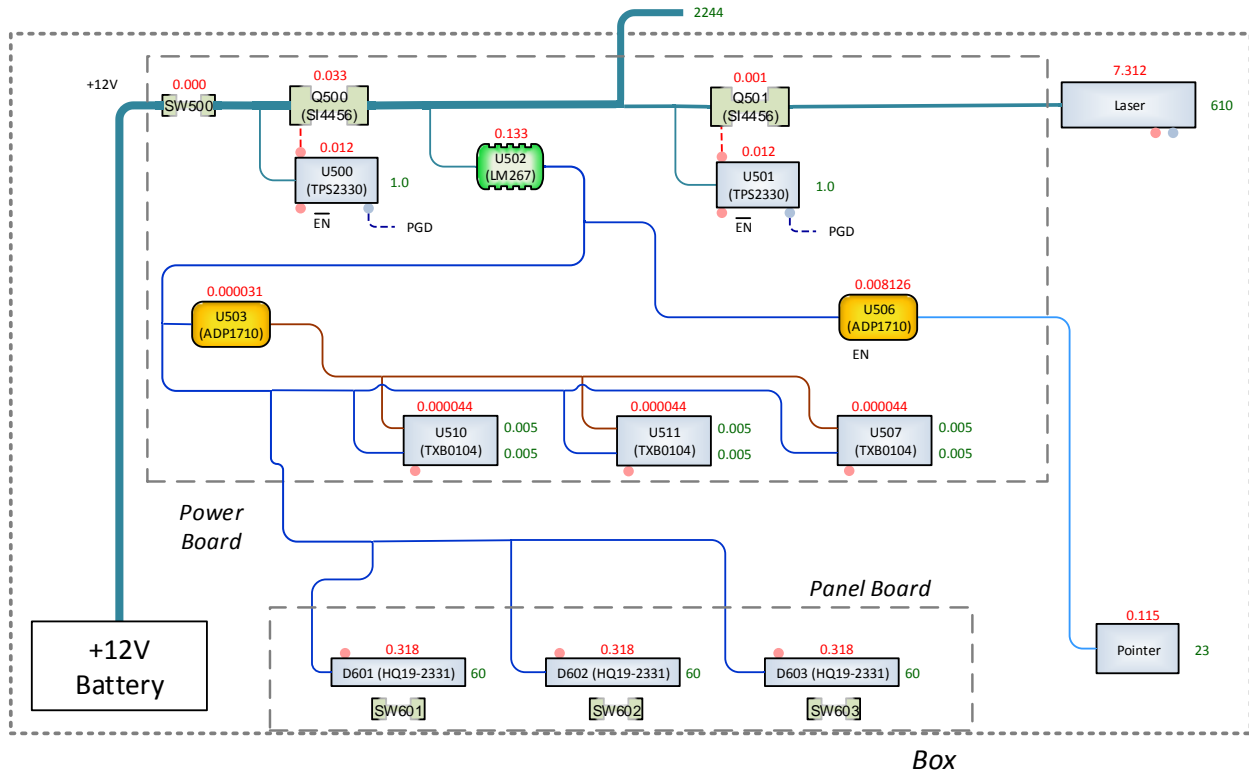


Power Switch Application Block Diagram



SW500 is not accessible for end-users. It's for technicians who are swapping batteries in the box. It also allows for the box to be shipped with the battery installed but not connected so that the battery doesn't discharge needlessly.

When the end-user switches SW601 "on," U500 (TPS2330) is enabled. The current out of Q500 (Vishay SI4456DY-T1-GE3) should turn on feeding about 2.3A @ 12V. The PGOOD signal from U500 (TPS2330) is fed into a circuit that lights pilot light D601, indicating "system on."

When the end-user switches SW602 "on," U501 (TPS2330) is enabled. The current out of Q501 (Vishay SI4456DY-T1-GE3) should turn on feeding about 0.61A @ 12V. It is important that the act of turning on Q501 doesn't glitch the +12V voltage for other loads upstream from Q501. The PGOOD signal from U501 (TPS2330) is fed into a circuit that lights pilot light D602, indicating "laser on."

Finally, when the end-user switches on SW603, Pilot light D603 turns on and U506 is enabled, turning on the Pointer and indicating it as such.

The switches SW601-603 are very small (500mA max) Wuerth 450301014042. These are the only switches available to the end-user and do not have the capacity for directly switching the application currents needed.