Topology 10: S1 ON, S2 OFF

Physical State: Phase 1 stores energy (S1 ON). Phase 2 transfers stored energy to output (S2 OFF, D7 ON).

Inductor Equations

```
diL1/dt = (V_in - vC3 - vC0) / L1
diL2/dt = V_in / L2
diL3/dt = 0
diL4/dt = 0
diL5/dt = -vC1 / L5
diL6/dt = vC0 / L6
```

Capacitor Equations

```
dvC1/dt = iL2 / C1
dvC3/dt = iL1 / C3
dvC0/dt = (iL1 + iL6 - P/vC0) / C0
```

Key Change from Topology 11: Phase 2 now in TRANSFER mode. L1 discharges through C3→L6→D7→Cout. L6 releases stored energy forward (diL6/dt > 0). C3 and L6 form parallel branches to output.