

Safe-Secure State Machine

Initialize

Outage Occur
[Outage Pin Rising Edge]
/ Activate Lock

Battery Low [$V_{batt} < T_1$] / Connect charger

Fully charge [$V_{batt} \geq T_2$] / Disconnect charger

Fire Stop [$Smoke < T_3$]
/ Go to idle

Power returned
[Outage Pin Falling Edge]
/ Deactivate Lock

Fire Occur [$Smoke \geq T_3$]
/ Emergency Exit

