

The diagram illustrates a complex state machine with the following components and transitions:

- outer_state** (Top Level):
 - Initial state (black dot) leads to **p_p11**.
 - Transitions: **E1** (to **p_p11_s12**), **D0** (to **p_p11_s1**), **A0** (self-loop on **p_p11_s21**), **E0** (to **p_s21**), **A1** (self-loop on **outer_state**).
- p** (Intermediate State):
 - Initial state (black dot) leads to **p_p12_p11_s12**.
 - Transitions: **I1** (to **p_p12_p11_s21**), **G0** (to **p_p22_s11**), **G1** (to **p_p12_p11_s21**).
- p_p11** (Nested State):
 - States: **p_p11_s11**, **p_p11_s12**, **p_p11_s21**, **p_p11_s22**.
 - Transitions: **e4** (**p_p11_s11** to **p_p11_s12**), **e1** (**p_p11_s12** to final), **e1** (**p_p11_s21** to **p_p11_s22**), **e2** (**p_p11_s22** to final), **e1** (**p_p11_s22** to **p_p11_s21**).
- p_p12** (Nested State):
 - States: **p_p12_p11_s12**, **p_p12_p11_s11**, **p_p12_p11_s21**, **p_p12_s21**, **p_p12_s22**.
 - Transitions: **e1** (**p_p12_p11_s12** to **p_p12_p11_s11**), **p_p12_final** (**p_p12_p11_s12** to **p_p12_s21**), **e4** (**p_p12_p11_s21** to **p_p12_s21**), **e1** (**p_p12_s21** to final), **e1** (**p_p12_s22** to **p_p12_s21**), **e2** (**p_p12_s22** to final).
- p_p22** (Nested State):
 - States: **p_p22_s11**, **p_p22_s12**, **p_p22_s21**, **p_p22_s22**.
 - Transitions: **e4** (**p_p22_s11** to **p_p22_s12**), **e1** (**p_p22_s12** to final), **e1** (**p_p22_s21** to **p_p22_s22**), **e2** (**p_p22_s22** to final).
- some_other_state** (Bottom Level):
 - Reached via **p_final** from **p** and **H0** from **p_s21**.
 - Transitions: **to_s** (downward), **F0** (upward to **p_p22_s21**).
- p_s21** (Intermediate State):
 - Reached via **E0** from **outer_state**.
 - Transitions: **B1** (to **p_p11_s21**), **G3** (to **p_p11_s22**), **F1** (to **p_p22_s11**), **C0** (to **p_p22_s11**), **C1** (from **p_p22_s21**), **H0** (downward to **some_other_state**).
- Transitions from p_p12 to p_p22**:
 - D1** (from **p_p12** to **p_p22**).
 - H1** (from **p_p12** to final).
 - D2** (from **p_p12_s21** to **p_p22_s21**).
 - B0** (from **some_other_state** to **p_p22_s21**).

