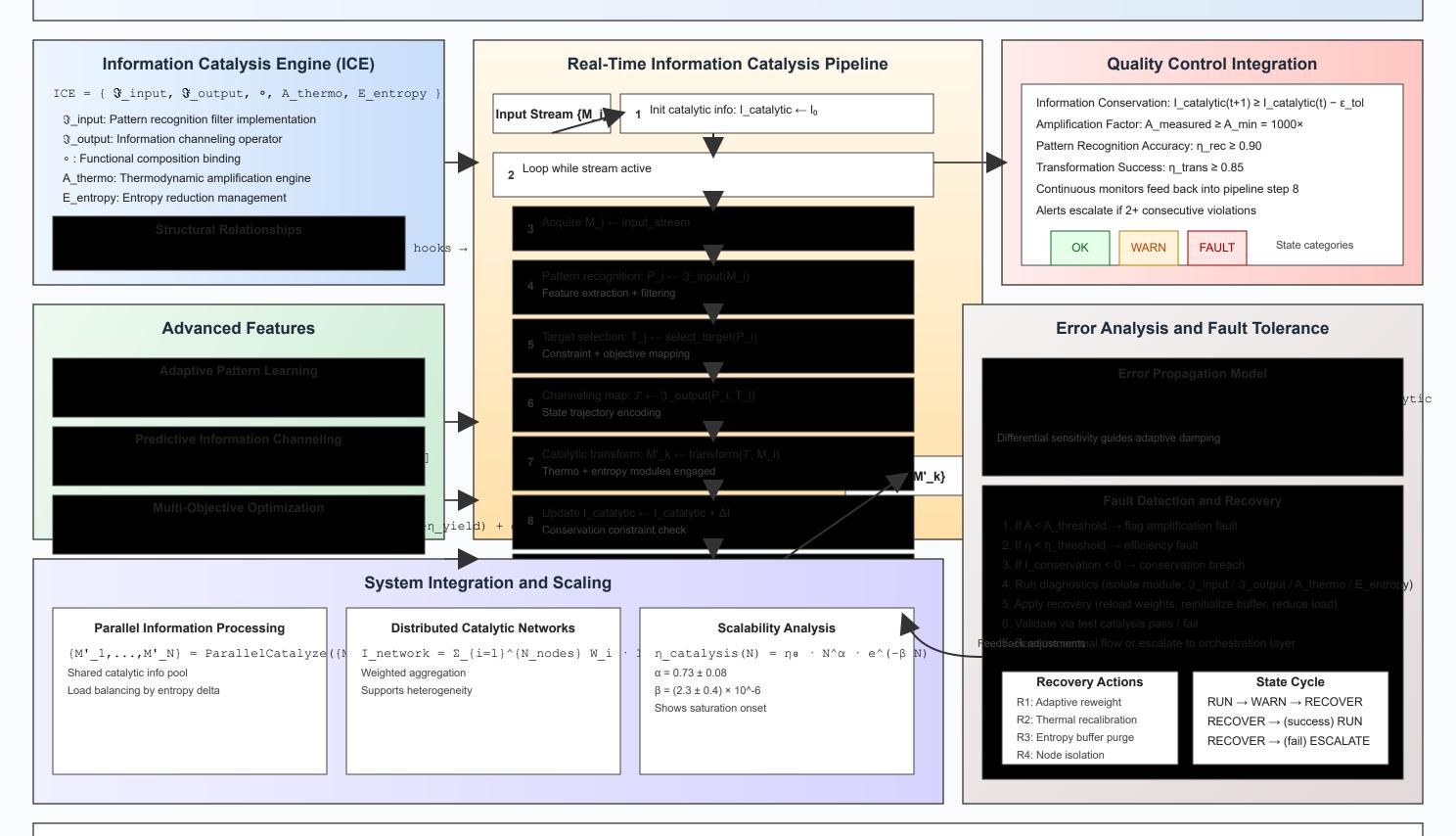
Implementation Architecture



Legend

\$_input / \$_output: Information operators (selection / channeling)

A_thermo: Amplification engine coupling computational narrowing to thermodynamic leverage

E entropy: Tracks ΔS and enforces controlled entropy reduction windows

I_catalytic: Persistent catalytic information reservoir (conservation under |ΔI| < k_B T In 2 bound)

Pipeline Steps 3-9 form per-molecule catalytic micro-cycle

Advanced features feed forward (better targeting) and backward (improved selection) loops

Scaling: Sublinear benefit taper captured by $exp(-\beta N)$ term

Fault tolerance uses multi-criteria triggers; recovery short-circuits before systemic degradation