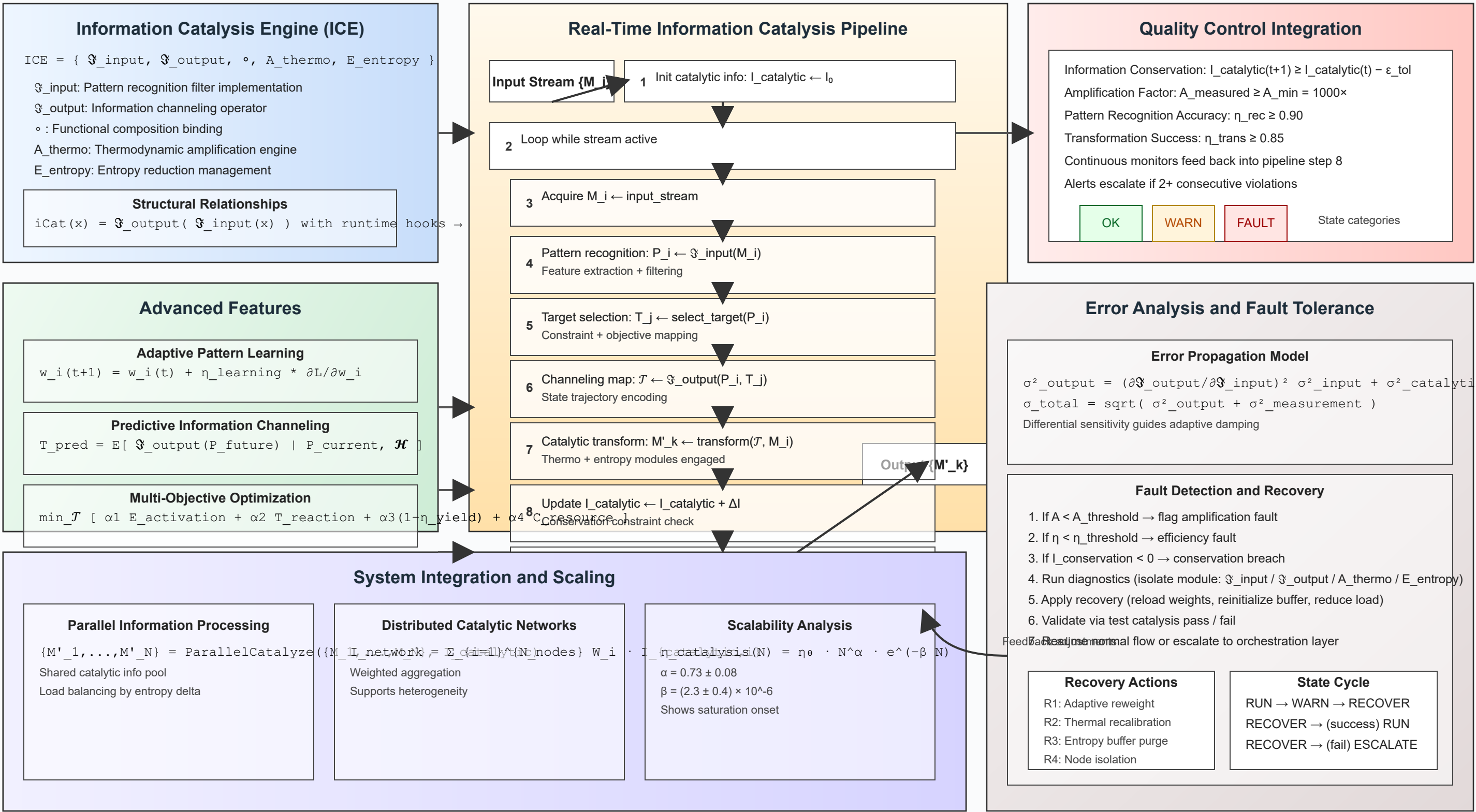


Implementation Architecture



Legend

$\mathfrak{S}_{\text{input}}$ / $\mathfrak{S}_{\text{output}}$: Information operators (selection / channeling)
 A_{thermo} : Amplification engine coupling computational narrowing to thermodynamic leverage
 E_{entropy} : Tracks ΔS and enforces controlled entropy reduction windows
 $I_{\text{catalytic}}$: Persistent catalytic information reservoir (conservation under $|\Delta I| < k_B T \ln 2$ 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