Figure S1

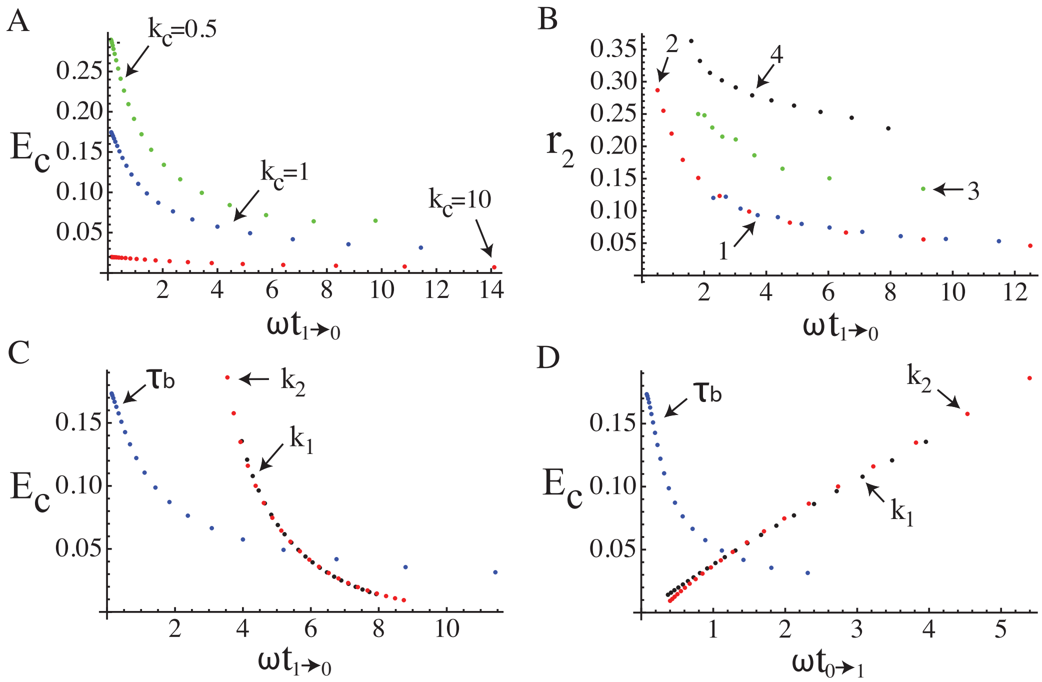

Figure S1: Noise amplification rate in single-positive-loop systems with respect to $t_{1\to0}$ and $t_{0\to1}$, respectively. (A) E_c versus $\omega t_{1\to0}$ for $k_c = 0.5, 1, 10$. Each dotted curve consists of 21 simulations with $(\tau_b)_n = 0.005e^{\Delta\tau_b n}$ and $\Delta\tau_b = -\ln(0.005)/20$. (B) r_2 versus $\omega t_{1\to0}$. Each point represents an average of r_2 based on 100 simulations with different noisy signals but fixed ω. Set 1 (blue): $\tau_b = 0.01$, $k_1 = 3$, $k_2 = 0.3$. Set 2 (red): $\tau_b = 0.1$, $k_1 = 3$, $k_2 = 0.3$. Set 3 (green): $\tau_b = 0.01$, $k_1 = 3$, $k_2 = 0.6$. Set 4 (black): $\tau_b = 0.01$, $k_1 = 1$, $k_2 = 0.3$. In set 2, ω takes $(1/\omega)_m = 2e^{\Delta dm}$, $\Delta d = \ln(50/2)/10$. For the rest, $(1/\omega)_m = 20e^{\Delta dm}$, $\Delta d = \ln(100/20)/10$. (C-D) E_c versus $\omega t_{1\to0}$ (C) or $\omega t_{0\to1}$ (D). τ_b curve (blue): $(\tau_b)_n = 0.005e^{\Delta\tau_b n}$, $\Delta\tau_b = -\ln(0.005)/20$; k_2 curve (red): $(k_2)_n = 0.06e^{\Delta k_2 n}$, $\Delta k_2 = \ln(1.2/0.06)/20$; k_1 curve (black): $(k_1)_n = e^{\Delta k_1 n}$, $\Delta k_1 = \ln(10)/20$. All simulations use the same parameters and inputs as their counterparts in Figure 3, unless otherwise specified.