

Parameter	Symbol	Units	NMOS	PMOS
Typical supply voltage	V_{DD}	V	1.8	1.8
Channel mobility	μ_n, μ_p	cm ² /V-sec	324	124
Gate oxide thickness	t_{ox}	meter	4.2e-9	4.2e-9
Oxide permittivity	ϵ_{ox}	F/m	3.45e-11	3.45e-11
Gate capacitance	$C_{ox} = \epsilon_{ox} / t_{ox}$	fF/ μ m ²	8.21	8.21
Process transconductance	$k' = \mu_n C_{ox}$	A/V ²	266e-6	102e-6
Nominal threshold voltage	V_{t0}	V	0.45	-0.52
Body effect coefficient	γ	$\sqrt{1/2}$	0.5	0.5
Channel length modulation parameter	$\frac{\partial x_d}{\partial V_{ds}}$	μ m/V	0.1	0.05
Source, drain side diffusion	L_d	μ m	0.03	0.03
Source, drain junction built-in potential	ψ_0	V	0.82	0.76
Overlap capacitance per unit gate width	C_{ol}	fF/ μ m	0.24	0.2
Source, drain-bulk junction capacitance	C_{j0}	fF/ μ m ²	1.03	1.24
Source, drain periphery capacitance	C_{jsw0}	fF/ μ m	1.34	1.74
Fermi level	ϕ_f	V	0.329	0.388
Body transconductance parameter	χ		0.25	0.2