Symbols and Abbreviations

A_0	DC open loop voltage gain
A_{V_T}	Matching constant for threshold voltage
A_β	Matching constant for current factor
β	Current factor
BW	Bandwidth
C_C	Compensation capacitance
C_{GD}	Gate-drain capacitance
C_{GS}	Gate-source capacitance
C_L	Load capacitance
C_{ox}	Specific oxide capacitance
C_{par}	Parasitic capacitance
C_{th}	Thermal capacitance in self heating model
ϵ_r	Dielectric constant
E_G	Bandgap energy
ef	Exponent of flicker noise frequency dependence
F	Electric field
f	Frequency
f_{ain}	Analog input frequency
f_{chop}	Chopping frequency
f_{max}	Maximum oscillation frequency
f_{nd}	Non-dominant pole frequency
f_{sample}	Sampling frequency
f_t	Transit frequency
g_{ds}	Small signal output conductance
g_m	Small signal transconductance
h_{fin}	Fin height
I_D	Drain current
I_{B2B}	Band-to-band tunneling current
I_{GATE}	Gate current at $V_{GS} = 0$, $V_{DS} = V_{DD}$
I_{ON}	On current at $V_{GS} = V_{DS} = V_{DD}$
I_{OFF}	Off current at $V_{GS} = 0$, $V_{DS} = V_{DD}$

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I_S	Diode saturation current
κ	Dielectric constant
K_f	Flicker noise coefficient
k_i	Scaling coefficient i of time constants in V_{shift} model
L_{el}	Effective channel length
L or L_{gate}	Transistor gate length
L_{min}	Minimum transistor gate length
μ	Charge carrier mobility
n	Number of bits
N	Noise power
N_A	Doping level
P	Power
$\Phi_{1/2}$	Complementary, non-overlapping clock phases
R_{DD}	Sensitivity of output current against supply voltage variations
R_G	Gate resistance
R_{Leak}	Diode leakage resistance
R_{out}	Output resistance
R_{SD}	Source-drain series resistance
R_{scale}	Scaling resistance in V_{shift} model
R_{th}	Thermal resistance in self heating model
s	Scaling factor
S	Signal power
T	Temperature
t_{dep}	Penetration depth of gate field
t_{eval}	Evaluation time
t_{ox}	Oxide thickness
t_{si}	Thickness of silicon layer
t_{stress}	Stress time
V_{bi}	Build in source potential
V_{CM}	Common mode voltage
V_{DD}	Positive supply voltage
V_D	Diode voltage
V_{DS}	Drain-source voltage
V_{GS}	Gate-source voltage
V_{ov}	Overdrive voltage $V_{GS}-V_T$
$V_{ref(p)(n)}$	(Positive) (negative) reference voltage
V_T	Threshold voltage
V_{the}	Thermal voltage
V_{shift}	Shift voltage representing time dependent V_T shift
V_{SS}	Negative supply voltage
V_{ss}	Maximum steady state V_T shift
V_{stress}	Stress voltage
w_{fin}	Fin width
W	Transistor (gate) width
x_j	Junction depth

ADC	Analog-to-digital converter
BEOL	Back end of line (metallization)
BGR	Bandgap reference
BOX	Buried oxide layer
CMRR	Common mode rejection ratio
DAC	Digital-to-analog converter
DIBL	Drain induced barrier lowering
DNL	Differential non-linearity
EI	Electrostatic integrity
ENOB	Effective number of bits
EOT	Equivalent oxide thickness
FD	Fully depleted
FET	Field effect transistor
GBW	Gain bandwidth product
INL	Integral non-linearity
IPTAT	Inverse proportional to absolute temperature
LDD	Lightly doped drain
LNA	Low noise amplifier
LSB	Least significant bit
MuGFET	Multi-gate FET
MuGTFET	Multi-gate tunneling FET
NDR	Negative differential resistance
NTF	Noise transfer function
OPC	Optical proximity correction
OSR	Oversampling ratio
PLL	Phase locked loop
PSRR	Power supply rejection ratio
SAR	Successive approximation register
SCE	Short channel effect
SEG	Selective epitaxial growth
SFDR	Spurious free dynamic range
SIP	System in package
SNDR	Signal-to-noise-and-distortion ratio
SNR	Signal-to-noise ratio
SOC	System on chip
SOI	Silicon on insulator
SR	Slew rate
(P)(N)TC	(Positive) (negative) temperature coefficient
TFET	Tunneling FET
THD	Total harmonic distortion
VCO	Voltage controlled oscillator
VIP3	Third order interception point
VTRO	Threshold voltage roll-off

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