

## LIST OF ABBREVIATIONS

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Abbreviation	Details
1D	One Dimensional
2D	Two Dimensional
3D	Three Dimensional
SCEs	Short Channel Effects
HCEs	Hot Carrier Effects
DG	Double Gate
GAA	Gate All Around
FinFET	Fin Field Effect Transistor
MOS	Metal Oxide Semiconductor
MOSFET	Metal Oxide Semiconductor Field Effect Transistor
SOI	Silicon-on-Insulator
FD	Fully Depleted
PD	Partly Depleted
IC	Integrated Circuit
GIDL	Gate Induced Drain Lowering
SC	Subthreshold Current
SS	Subthreshold Swing
TMG	Triple Material Gate
DMG	Dual/Double Material Gate
TM DG	Triple Material Double Gate
DM DG	Double Material Double Gate
DM DG	Dual Material Double Gate

S/D	Source/Drain
UTB	Ultra Thin Body
CMOS	Complementary Metal Oxide Semiconductor
BOX	Buried Oxide
DIBL	Drain Induced Barrier Lowering
TCAD	Technology Computer-Aided Design
LDD	Lightly Doped Drain
GC	Graded Channel
GCDG	Graded Channel Double Gate
GCDMDG	Graded Channel Dual Material Double Gate
LAC	Laterally Asymmetric Channel
LDMOS	Laterally Diffused MOS
nm	Nano Meter
V	Voltage
eV	Electron Volt
mA	Milli Ampere
$\mu\text{m}$	Micro Meter
nA	Nano Ampere