LIST OF ABBREVIATIONS

Abbreviation Details

2D Two Dimensional

3D Three Dimensional

GU Gate-Underlap

SCEs Short Channel Effects

DG Double Gate

GAA Gate All Around

FinFET Fin Field Effect Transistor

MOS Metal Oxide Semiconductor

MOSFET Metal Oxide Semiconductor Field Effect Transistor

RingFET Ring Gate Field Effect Transistor

SOI Silicon-on-Insulator

FD Fully Depleted

PD Partly Depleted

IC Integrated Circuit

IGFET Insulated Gate Field Effect Transistor

HCEs Hot Carrier Effects

GIDL Gate Induced Drain Lowering

SHEs Self Heating Effects

SS Subthreshold Swing

TMG Triple Material Gate

DG Dual Material Gate

S/D Source/Drain

UTB Ultra Thin Body

RSD Raised Source/Drain

ESD Elevated Source/Drain

DIBL Drain Induced Barrier Lowering

nm Nanometer

V Voltage

eV Electron Volt

mA Milli Ampere

nA Nano Ampere