.MODEL N NMOS ( LEVEL = 49

+VERSION = 3.1 TNOM = 27 TOX = 7.7E-9

+XJ = 1E-7 NCH = 2.2E17 VTH0 = 0.4846691

+K1 = 0.5892432 K2 = 6.819109E-3 K3 = 58.9206043

+K3B = -5.707261 W0 = 5E-5 NLX = 2.667229E-7

+DVT0W = 0 DVT1W = 0 DVT2W = 0

+DVT0 = 3.5658268 DVT1 = 0.9903361 DVT2 = -0.3

+U0 = 373.3706572 UA = -6.60403E-10 UB = 2.374778E-18

+UC = 4.301367E-11 VSAT = 1.506305E5 A0 = 0.9856582

+AGS = 0.0969098 B0 = 8.303345E-7 B1 = 5E-6

+KETA = 1.903391E-3 A1 = 0 A2 = 0.4961954

+RDSW = 1.312631E3 PRWG = -0.1572491 PRWB = -0.1237456

+WR = 1 WINT = 1.588655E-7 LINT = 0

+XL = -5E-8 XW = 1.5E-7 DWG = -1.02646E-8

+DWB = 2.964509E-9 VOFF = -0.0969644 NFACTOR = 1.5478791

+CIT = 0 CDSC = 2.4E-4 CDSCD = 0

+CDSCB = 0 ETA0 = 0.6 ETAB = 0.0351556

+DSUB = 0.7427757 PCLM = 1.4662529 PDIBLC1 = 1.724736E-3

+PDIBLC2 = 1.350105E-4 PDIBLCB = 0.0515601 DROUT = 2.607002E-4

+PSCBE1 = 7.262388E8 PSCBE2 = 1E-3 PVAG = 0

+DELTA = 0.01 RSH = 79.7 MOBMOD = 1

+PRT = 0 UTE = -1.5 KT1 = -0.11

+KT1L = 0 KT2 = 0.022 UA1 = 4.31E-9

+UB1 = -7.61E-18 UC1 = -5.6E-11 AT = 3.3E4

+WL = 0 WLN = 1 WW = 0

+WWN = 1 WWL = 0 LL = 0

+LLN = 1 LW = 0 LWN = 1

+LWL = 0 CAPMOD = 2 XPART = 0.5

+CGDO = 2.71E-10 CGSO = 2.71E-10 CGBO = 1E-12

+CJ = 9.064798E-4 PB = 0.8 MJ = 0.3498899

+CJSW = 3.451852E-10 PBSW = 0.8 MJSW = 0.1311094

+CJSWG = 1.82E-10 PBSWG = 0.8 MJSWG = 0.1311094

+CF = 0 PVTH0 = -0.036497 PRDSW = -120.561226

+PK2 = 4.184573E-3 WKETA = 6.95214E-4 LKETA = 3.536762E-4 )

\*

.MODEL P PMOS ( LEVEL = 49

+VERSION = 3.1 TNOM = 27 TOX = 7.7E-9

+XJ = 1E-7 NCH = 8.52E16 VTH0 = -0.733068

+K1 = 0.4252442 K2 = -9.003354E-3 K3 = 84.5591853

+K3B = -5 W0 = 7.175477E-6 NLX = 3.221895E-7

+DVT0W = 0 DVT1W = 0 DVT2W = 0

+DVT0 = 2.1106892 DVT1 = 0.6018553 DVT2 = 0.0474482

+U0 = 148.7816878 UA = 1E-10 UB = 1.633948E-18

+UC = -2.18946E-11 VSAT = 9.051001E4 A0 = 1.0891818

+AGS = 0.368696 B0 = 2.622452E-6 B1 = 5E-6

+KETA = -5.742856E-3 A1 = 1.468931E-3 A2 = 1

+RDSW = 4E3 PRWG = -0.0738732 PRWB = 0.4291869

+WR = 1 WINT = 1.384061E-7 LINT = 0

+XL = -5E-8 XW = 1.5E-7 DWG = -1.128663E-8

+DWB = 1.513202E-8 VOFF = -0.1341862 NFACTOR = 2

+CIT = 0 CDSC = 2.4E-4 CDSCD = 0

+CDSCB = 0 ETA0 = 0.0212277 ETAB = 6.29745E-3

+DSUB = 0.3727868 PCLM = 5.845859 PDIBLC1 = 3.688535E-5

+PDIBLC2 = 2.566948E-3 PDIBLCB = 3.225373E-3 DROUT = 0.012755

+PSCBE1 = 7.942981E10 PSCBE2 = 5.004237E-10 PVAG = 3.3221093

+DELTA = 0.01 RSH = 158.6 MOBMOD = 1

+PRT = 0 UTE = -1.5 KT1 = -0.11

+KT1L = 0 KT2 = 0.022 UA1 = 4.31E-9

+UB1 = -7.61E-18 UC1 = -5.6E-11 AT = 3.3E4

+WL = 0 WLN = 1 WW = 0

+WWN = 1 WWL = 0 LL = 0

+LLN = 1 LW = 0 LWN = 1

+LWL = 0 CAPMOD = 2 XPART = 0.5

+CGDO = 2.48E-10 CGSO = 2.48E-10 CGBO = 1E-12

+CJ = 1.447953E-3 PB = 0.99 MJ = 0.5587448

+CJSW = 3.609375E-10 PBSW = 0.99 MJSW = 0.3017204

+CJSWG = 4.42E-11 PBSWG = 0.99 MJSWG = 0.3017204

+CF = 0 PVTH0 = 9.131308E-3 PRDSW = 173.3451256

+PK2 = 1.857113E-3 WKETA = -2.660088E-3 LKETA = -0.0113815 )