

* BSIM3 models for AMI Semiconductor's C5 process

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* Don't forget the .options scale=300nm if using drawn lengths

* and the MOSIS SUBM design rules

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* 2<Ldrawn<500 10<Wdrawn<10000 Vdd=5V

* Note minimum L is 0.6 um while minimum W is 3 um

* Change to level=49 when using HSPICE

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.MODEL NMOS NMOS (
+VERSION = 3.1          TNOM = 27          LEVEL = 8
+XJ = 1.5E-7           NCH = 1.7E17       TOX = 1.39E-8
+K1 = 0.8351612        K2 = -0.0839158    VTH0 = 0.6696061
+K3B = -7.6841108      W0 = 1E-8         K3 = 23.1023856
+DVT0W = 0             DVT1W = 0         NLX = 1E-9
+DVT0 = 2.9047241      DVT1 = 0.4302695  DVT2W = 0
+U0 = 458.439679       UA = 1E-13        DVT2 = -0.134857
+UC = 1.629939E-11     VSAT = 1.643993E5  UB = 1.485499E-18
+AGS = 0.1194608       B0 = 2.674756E-6   A0 = 0.6103537
+KETA = -2.640681E-3   A1 = 8.219585E-5        B1 = 5E-6
+RDSW = 1.387108E3     PRWG = 0.0299916   A2 = 0.3564792
+WR = 1                WINT = 2.472348E-7 PRWB = 0.0363981
+XL = 0                XW = 0            LINT = 3.597605E-8
+DWB = 5.306586E-8     VOFF = 0         DWG = -1.287163E-8
+CIT = 0               CDSC = 2.4E-4     NFACTOR = 0.8365585
+CDSCB = 0             ETA0 = 0.0246738   CDSCD = 0
+DSUB = 0.2543458      PCLM = 2.5945188      ETAB = -1.406123E-3
+PDIBLC2 = 2.311743E-3 PDIBLCB = -0.0272914    PDIBLC1 = -0.4282336
+PSCBE1 = 5.598623E8   PSCBE2 = 5.461645E-5    DROUT = 0.7283566
+DELTA = 0.01          RSH = 81.8        PVAG = 0
+PRT = 8.621           UTE = -1          MOBMOD = 1
+KT1L = -2.58E-9       KT2 = 0            KT1 = -0.2501
+UB1 = -4.8E-19        UC1 = -7.5E-11    UA1 = 5.4E-10
+WL = 0                WLN = 1          AT = 1E5
+WWN = 1               WWL = 0          WW = 0
+LLN = 1               LW = 0           LL = 0
+LWL = 0               CAPMOD = 2        LWN = 1
+CGDO = 2E-10          CGSO = 2E-10      XPART = 0.5
+CJ = 4.197772E-4      PB = 0.99         CGBO = 1E-9
+CJSW = 3.242724E-10   PBSW = 0.1         MJ = 0.4515044
+CJSWG = 1.64E-10      PBSWG = 0.1        MJSW = 0.1153991
+CF = 0                PVTH0 = 0.0585501  MJSWG = 0.1153991
+PK2 = -0.0299638      WKETA = -0.0248758  PRDSW = 133.285505
+AF = 1                KF = 0)          LKETA = 1.173187E-3
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+VERSION = 3.1          TNOM = 27          LEVEL = 8
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+K1 = 0.8351612        K2 = -0.0839158    VTH0 = -0.9214347
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+K1	= 0.5553722	K2	= 8.763328E-3	K3	= 6.3063558
+K3B	= -0.6487362	W0	= 1.280703E-8	NLX	= 2.593997E-8
+DVT0W	= 0	DVT1W	= 0	DVT2W	= 0
+DVT0	= 2.5131165	DVT1	= 0.5480536	DVT2	= -0.1186489
+U0	= 212.0166131	UA	= 2.807115E-9	UB	= 1E-21
+UC	= -5.82128E-11	VSAT	= 1.713601E5	A0	= 0.8430019
+AGS	= 0.1328608	B0	= 7.117912E-7	B1	= 5E-6
+KETA	= -3.674859E-3	A1	= 4.77502E-5	A2	= 0.3
+RDSW	= 2.837206E3	PRWG	= -0.0363908	PRWB	= -1.016722E-5
+WR	= 1	WINT	= 2.838038E-7	LINT	= 5.528807E-8
+XL	= 0	XW	= 0	DWG	= -1.606385E-8
+DWB	= 2.266386E-8	VOFF	= -0.0558512	NFACTOR	= 0.9342488
+CIT	= 0	CDSC	= 2.4E-4	CDSCD	= 0
+CDSCB	= 0	ETA0	= 0.3251882	ETAB	= -0.0580325
+DSUB	= 1	PCLM	= 2.2409567	PDIBLC1	= 0.0411445
+PDIBLC2	= 3.355575E-3	PDIBLCB	= -0.0551797	DROUT	= 0.2036901
+PSCBE1	= 6.44809E9	PSCBE2	= 6.300848E-10	PVAG	= 0
+DELTA	= 0.01	RSH	= 101.6	MOBMOD	= 1
+PRT	= 59.494	UTE	= -1	KT1	= -0.2942
+KT1L	= 1.68E-9	KT2	= 0	UA1	= 4.5E-9
+UB1	= -6.3E-18	UC1	= -1E-10	AT	= 1E3
+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	= 2.9E-10	CGSO	= 2.9E-10	CGBO	= 1E-9
+CJ	= 7.235528E-4	PB	= 0.9527355	MJ	= 0.4955293
+CJSW	= 2.692786E-10	PBSW	= 0.99	MJSW	= 0.2958392
+CJSWG	= 6.4E-11	PBSWG	= 0.99	MJSWG	= 0.2958392
+CF	= 0	PVTH0	= 5.98016E-3	PRDSW	= 14.8598424
+PK2	= 3.73981E-3	WKETA	= 5.292165E-3	LKETA	= -4.205905E-3
+AF	= 1	KF	= 0)		