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* 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
*
* 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          TOX      = 1.39E-8
+XJ      = 1.5E-7       NCH     = 1.7E17      VTH0     = 0.6696061
+K1      = 0.8351612    K2     = -0.0839158   K3       = 23.1023856
+K3B     = -7.6841108   W0     = 1E-8        NLX      = 1E-9
+DVTOW   = 0           DVT1W  = 0          DVT2W    = 0
+DVTO    = 2.9047241   DVT1   = 0.4302695  DVT2     = -0.134857
+U0      = 458.439679   UA     = 1E-13      UB       = 1.485499E-18
+UC      = 1.629939E-11 VSAT   = 1.643993E5  A0       = 0.6103537
+AGS     = 0.1194608   B0     = 2.674756E-6 B1       = 5E-6
+KETA    = -2.640681E-3 A1     = 8.219585E-5 A2       = 0.3564792
+RDSW    = 1.387108E3  PRWG   = 0.0299916  PRWB     = 0.0363981
+WR      = 1           WINT   = 2.472348E-7 LINT     = 3.597605E-8
+XL      = 0           XW     = 0          DWG      = -1.287163E-8
+DWB     = 5.306586E-8 VOFF   = 0          NFACTOR  = 0.8365585
+CIT      = 0          CDSC   = 2.4E-4     CDSCD    = 0
+CDSCB   = 0          ETA0   = 0.0246738  ETAB     = -1.406123E-3
+DSUB    = 0.2543458  PCLM   = 2.5945188  PDIBLC1  = -0.4282336
+PDIBLC2 = 2.311743E-3 PDIBLCB = -0.0272914  DROUT    = 0.7283566
+PSCBE1  = 5.598623E8 PSCBE2 = 5.461645E-5 PVAG     = 0
+DELTA   = 0.01       RSH    = 81.8      MOBMOD   = 1
+PRT     = 8.621      UTE    = -1        KT1      = -0.2501
+KT1L    = -2.58E-9   KT2    = 0         UA1      = 5.4E-10
+UB1     = -4.8E-19   UC1    = -7.5E-11  AT       = 1E5
+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    = 2E-10      CGSO   = 2E-10     CGBO     = 1E-9
+CJ      = 4.197772E-4 PB      = 0.99      MJ       = 0.4515044
+CJSW    = 3.242724E-10 PBSW   = 0.1       MJSW    = 0.1153991
+CJSWG   = 1.64E-10  PBSWG  = 0.1       MJSWG   = 0.1153991
+CF      = 0          PVTH0  = 0.0585501  PRDSW   = 133.285505
+PK2     = -0.0299638 WKETA  = -0.0248758  LKETA   = 1.173187E-3
+AF      = 1          KF     = 0)
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.MODEL PMOS PMOS (
+VERSION = 3.1          TNOM    = 27          TOX      = 1.39E-8
+XJ      = 1.5E-7       NCH     = 1.7E17      VTH0     = -0.9214347
+K1      = 0.5553722    K2     = 8.763328E-3 K3       = 6.3063558
+K3B     = -0.6487362   W0     = 1.280703E-8 NLX      = 2.593997E-8
+DVTOW   = 0           DVT1W  = 0          DVT2W    = 0
+DVTO    = 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
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+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)		