

```

#!/usr/bin/perl
use warnings;
print "perlMakeModelTables2.pl is being run\n " ;
$paramfilename = 'BSIM4ParametersListing0.txt' ;
$ProcessOrder = 'ReOrderList' ;
$modelFiles = 'BeenReordered_Padded0.txt' ;
$GeoName = 'nmos' ;
$modelkey = '.model';
$pad_len = 10;
$pad_len1 = 9;
$pad_len2 = 30;
$N_proc = 0;
print "\n";
$ProcessLabel = sprintf("%-${pad_len}s", $GeoName);
print "$ProcessLabel";
open(INFILE, "$ProcessOrder") || die "cannot open $ProcessOrder" ;
@ArrayOfLines = <INFILE> ;
foreach $Eachline (@ArrayOfLines) # < 0 >each at $ProcessOrder
{ (@ArrayOfWords) = split(/ /, $Eachline) ;
$Eachline =~ s/\n//g ;
$processValue[$N_proc] = $Eachline;
$N_proc = $N_proc + 1;
$Process2Label = sprintf("%s", $ArrayOfWords[0]);
$ProcessLabel = sprintf("%${pad_len}s", $Process2Label);
print "$ProcessLabel";
} print "\n" ; # < /0 >
close(INFILE) ;
# print "@processValue \n";
$N_proc = $N_proc + 1;
open(INFILE1, "$paramfilename") || die "cannot open $paramfilename" ;
@ArrayOfParameters = <INFILE1> ;
# print "@ArrayOfParameters\n";
foreach $Paramline (@ArrayOfParameters) #< 1 >each at $paramfilename
{ (@ArrayOfPWords) = split(/ /, $Paramline) ;
$L1 = length($ArrayOfPWords[0]);
$First = $ArrayOfPWords[0];
$Second = substr($Paramline, $L1+1, length($Paramline) - $L1 - 2 );
if ( $First =~ /====/ )
{ print "$Paramline"; } else
{ $Firstpadded = sprintf("%-${pad_len}s", $First); #< 1B >print comment
$Secondpadded = pack("A$pad_len2", $Second);
$ParmLine2Print = sprintf("%-${pad_len}s|", $First);
for ($k=0; $k < $N_proc; $k++) {$PrintLineArray[$k] = " " ;}
$PrintLineArray[0] = sprintf("%-${pad_len}s", $First);
for ($i=0; $i < $N_proc; $i++) #< 2 > each at $processValue[$i]
{ $ThisProcess = $processValue[$i] ;
$RightProcess = 0;
$RightModel = 0;
open(INFILE2, "$ModelFiles") || die "cannot open $paramfilename" ;
<INFILE2> ;
foreach $Dataline (@ArrayOfDataLines) #< 3 >each line in $ModelFiles
{ if ($Dataline =~ /$ThisProcess/i) { $RightProcess = 1;}
if ($RightProcess > 0 & ($Dataline =~ /$Modelkey/i) & ($Dataline =~ /$GeoName/i) )
{ # print "$ThisProcess $Dataline";
$RightProcess = 0;
$RightModel = 1;
}
if ($RightModel > 0) #< 4 >do if rightmodel
{ (@ArrayOfData) = split(/\s+/, $Dataline) ;
# $DLen = $#ArrayOfData;
$DLen2 = @ArrayOfData;
for ($j=0; $j < $DLen2; $j++) #< 5 >each data item
{ if ($ArrayOfData[$j] =~ /$First\b/i) #< 6 >found right parameter and value
{ # print "$ThisProcess $ArrayOfData[$j] $ArrayOfData[$j+1] \n " ;

```

```
    if ( $ArrayOfData[$j+1] =~ /\d/ )
    { $Parmval2Print = sprintf("%4.4g",$ArrayOfData[$j+1] );
    } else
    { $Parmval2Print = " ";
    }
    $PrintLineArray[$i+1] = sprintf("%${pad_len}s", $Parmval2Print);
}
#< /6 >
#< /5 >
if (($Dataline =~ /$Modelkey/i) & ($Dataline !~ /$GeoName/i)) {$RightModel = 0;}
#< /4 >
} close(INFILE2) ; #< /3 >
# print "$ParmLine2Print \n "; #< /2 >
}
for ($k=0; $k < $N_proc; $k++) { print "$PrintLineArray[$k]";}
print " $Second \n"; #< /1B >
} print " \n" ; #< /1 >
close(INFILE1) ;
print " \n" ;

# cd /Users/donsauer/Documents/KEY/IDEA2IC/PlayWithPerl
# perl MakeModelTables2.pl
```