

HICUM L2 version 2.24

- Changes in model *parameter ranges*
 - *DT0H* range modified from no range to $(-inf:inf)$
 - *VPT* ranges modified from $[0:inf]$ to $(0:inf]$
 - punch-through voltages should be limited to values > 0
 - Temperature coefficient (ζ_{xyz}) range modified to $[-10:10]$
- Minor *code related changes*
 - Elimination of "ddx" operator use for internal capacitance determination
 - => "ddx" used only for OP info
 - => Capacitance $C_j C_i$ (for transit time and avalanche current bias dependence) is calculated by *analytical equations* (as in earlier versions)
 - Conditional statement in NQS block to prevent transit time T_f from being zero
 - T_f can be zero if default values ($= 0$) for *all* transit time parameters are used although this is clearly non-physical
 - very small default value for T_0 can cause problems in NQS normalization
 - => default value would have to be process dependent