



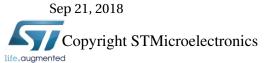
MIM CAPACITOR models

DK1.2_RF_mmW

Comparison with DK1.1_RF_mmW model(s)

Spice Models Benchmark

Please use the bookmark to navigate



Technology R&D Crolles Site - TDP/TDS/SPICE Modeling

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General information on models

- Maximum supply voltage is V.
- Validity domain is defined as follows:







Output parameters definitions

● Model(s): cmim16acc_acc



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cmim16acc_acc Electrical characteristics scaling



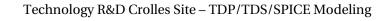


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Mismatch

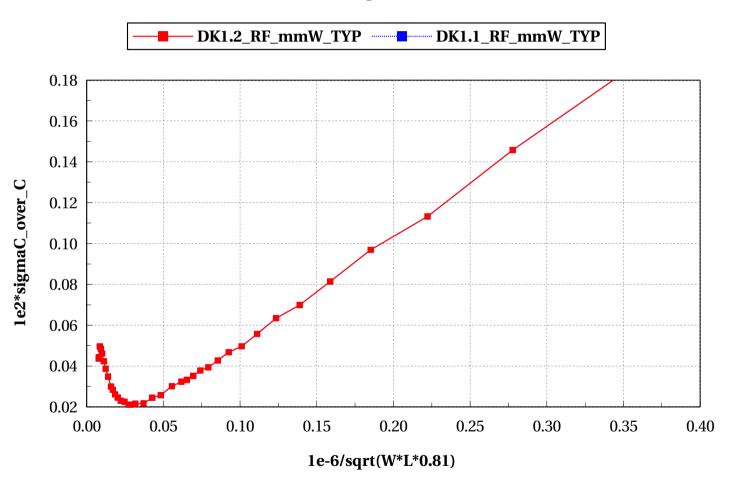


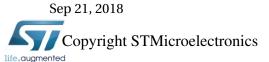




cmim16acc_acc, 1e2*sigmaC_over_C vs 1e-6/sqrt(W*L*0.81)

f_ext==1e3 and Temp==25 and relax==0



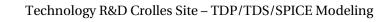






Annex





ST Confidential



Conditions of simulations

The simulations were done with SBenchLSF Alpha using Eldo simulator 2018.3.

- Model cmim16acc_acc (DK1.2_RF_mmW)
 - ✓ Input Parameters
 - **x** mc_runs = 1000
 - \times vsub1 = 0
 - \times temp = 25 °C
 - \mathbf{x} mc_sens = 0
 - \mathbf{x} vj = 0 V
 - \times f_ext = 1e3 Hz
 - **✗** sbenchlsf_release = Alpha
 - **x** ams_release = 2018.3
 - **✗** model_version = 1.0
 - **x** mc_nsigma = 3
 - ✓ Sweep Parameters
 - ✓ Extra parameters
 - **✗** cmim16acc_dev = 1
- Model cmim16acc_acc (DK1.1_RF_mmW)





- ✓ Input Parameters
 - **x** mc_runs = 1000
 - \times vsub1 = 0
 - **x** temp = $25 \, ^{\circ}$ C
 - \mathbf{x} mc_sens = 0
 - \mathbf{x} vj = 0 V
 - $x f_ext = 1e3 Hz$
 - **x** sbenchlsf_release = Alpha
 - **x** ams_release = 2018.3
 - **✗** model_version = 1.0
 - **x** mc_nsigma = 3
- ✓ Sweep Parameters
- ✓ Extra parameters
 - **✗** cmim16acc_dev = 1