

Samsung Library Install Guide For HSpice

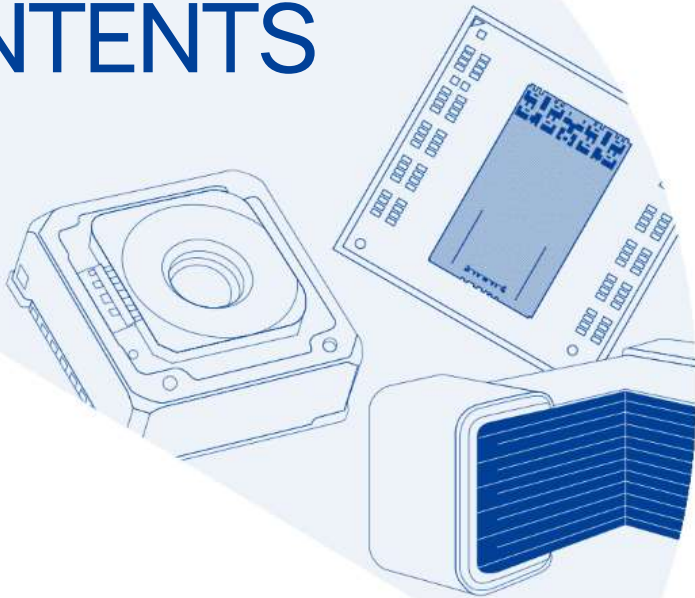
MARCH, 2024

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01. How to Install Samsung Library (1)

- If you have the previous version of Samsung Library, please uninstall the library at first and download the latest library in [our homepage](#).

* Main Page > SUPPORT > Software Library

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Product	Data Type	Update Date	List	Download
MLCC, Power Inductor, Tantalum *Static model	Samsung Static precise model Library files (*.lib) for Hspice	2023.11		
MLCC *Interactive model	Samsung MLCC (simple model) Library files (*.lib) for Hspice	2023.11		
	Samsung MLCC (precise model) Library files (*.lib) for Hspice	2023.11		

Software Library Notice

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02. How to Use Samsung Library (1)

- Download ' *_H.lib ' files in HSpice Library folder.
- Open the file as text document, Check the file path and the variable decared as subcircuit.
- Interactive precise model Example
 - file path name : /proj/hspice/CL32Y106KBJVPJ_Simple_Interactive_H.lib
 - subcircuit variable : CL32B475KCVZNW_DCtemp

```

|* CL32B475KCVZNW Multilayer Ceramic Capacitor Interactive Precise Model for HSPICE
+-----+
* Model Generated by Samsung Electro-Mechanics
* Samsung Spice Model Version 4.0
* Products : Multilayer Ceramic Capacitor(High Reliability)
+-----+
* Characteristics :
*
*   Nominal Capacitance = 4.7uF
*   Capacitance Tolerance = +/-10%
*   TCC = X7R(-55 ~ +125 Cels.)
*   Rated Voltage = 100Vdc
*   Size = 1210(unit:inch), 3225(unit:mm)
*   Length = 3.20 +/-0.30 mm
*   Width = 2.50 +/-0.30 mm
*   Thickness = 2.50 +/-0.30 mm
* Applicable condition :
*   Frequency : 300Hz ~ 6GHz
*   Measurement Temperature : X7R(-55 ~ +125 Cels.)
*   DC bias Value = 0V ~ 40V
*   Small Signal as Network Analyzer
+-----+
* External Node Assignments :
*
*   1 o----||----o 2
*
+-----+
.SUBCKT CL32B475KCVZNW_DCtemp Port1 Port2
.PROT ddtz9sittwgc 1-shjuc-xj5ejH>(%J)7-u#//js:B-i:'%ep$V,C'/25B]+):fJ5H#uC(1y)e-u>9%J;X5i#'%'
UPSVE45*M;v%9<K:5F(Dz)b5+3:]K-.X5L'BisEncrypt21h)CF'2d6=5!-3)#-= 8%,q=/j9x3IB;Z0$$180DC
jHU/(=h#pH//=(j#6eEuhT35W3E1ET3VW*[Bt;0.1:BE;U.]:$Bh;0.j:!!J-s<<6)E0:25!;.9!J2=>+pw*WhP7.pHU
$$$XC$257J#6Me/vt33u:!!%-OX<63{x}z>U)*[12=i+PC*#Hh[02S;K Gal# >IFE*x# >IFE;h#/RYa1L0T#v1v>H.

```

02. How to Use Samsung Library (2)

- Open or Create Simulation Setting file (*.sp) and set the variables as shown below.

```
.OPTION LIST NODE POST
.inc /proj/hspice/CL32Y106KBJVPJ_Simple_Interactive_H.lib
.ac dec 101 3e4 6e9
.Temp 48
X1 n003 0 CL32Y106KBJVPJ Dctemp
```

Downloaded file path

Set node

Subcircuit Variable

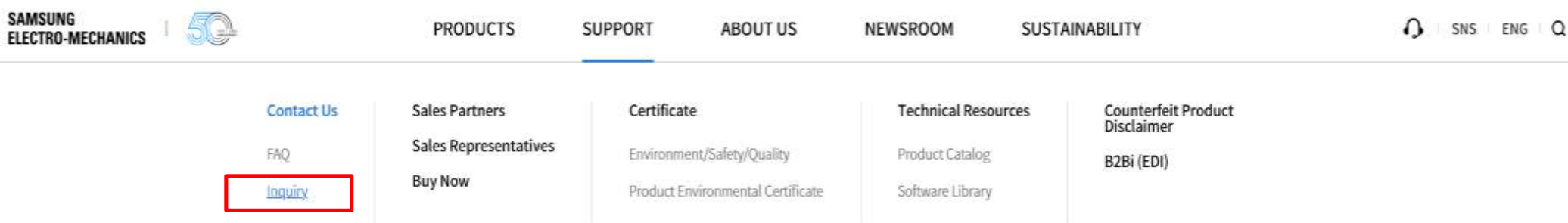
※ DC Voltage value is automatically detected in circuit

- Run Simulation.

03. Contact

- If you have any questions about this library, please contact our website

<https://www.samsungsem.com/global/support/contact-us/inquiry.do>



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