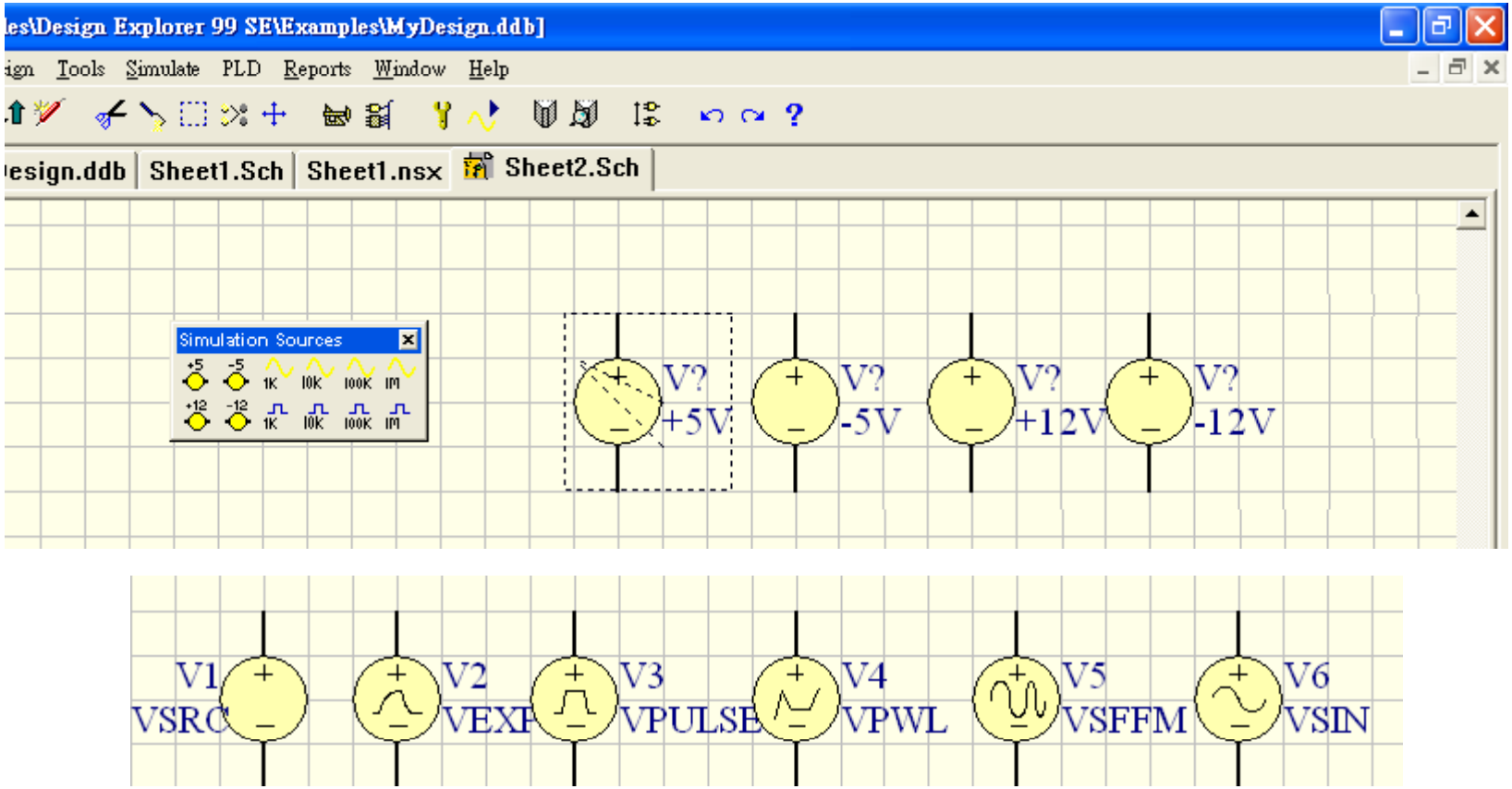
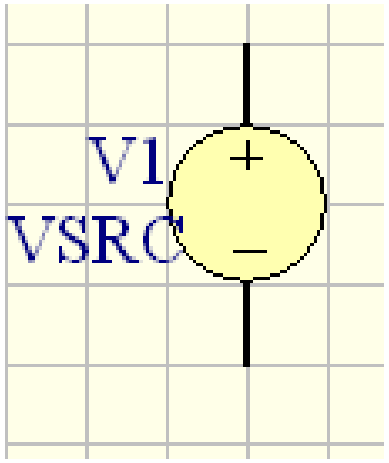
第10章 模擬電路及電源元件

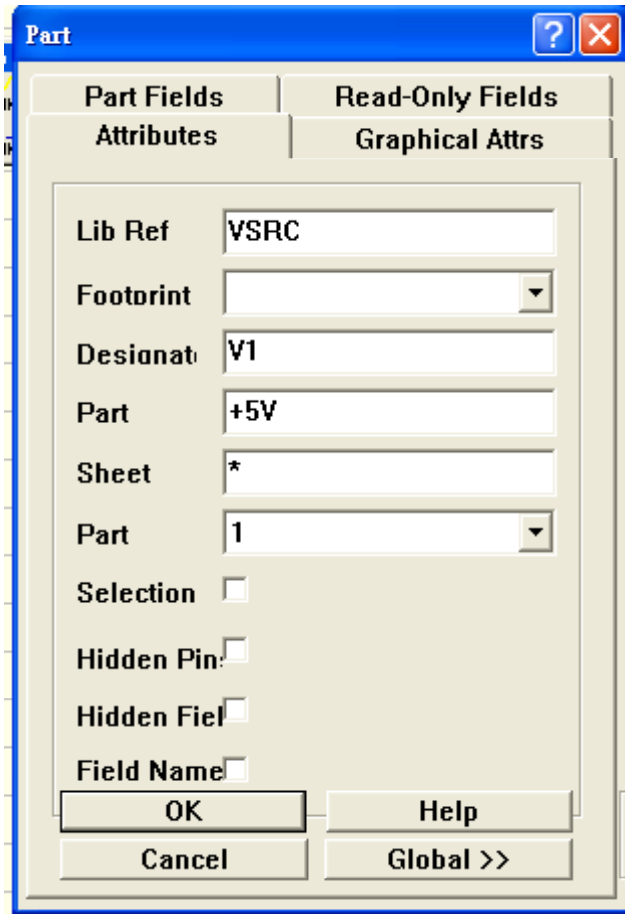
- Protel 99 SE的SPICE串接檔說明
- 設定畫面
- 偏壓點分析

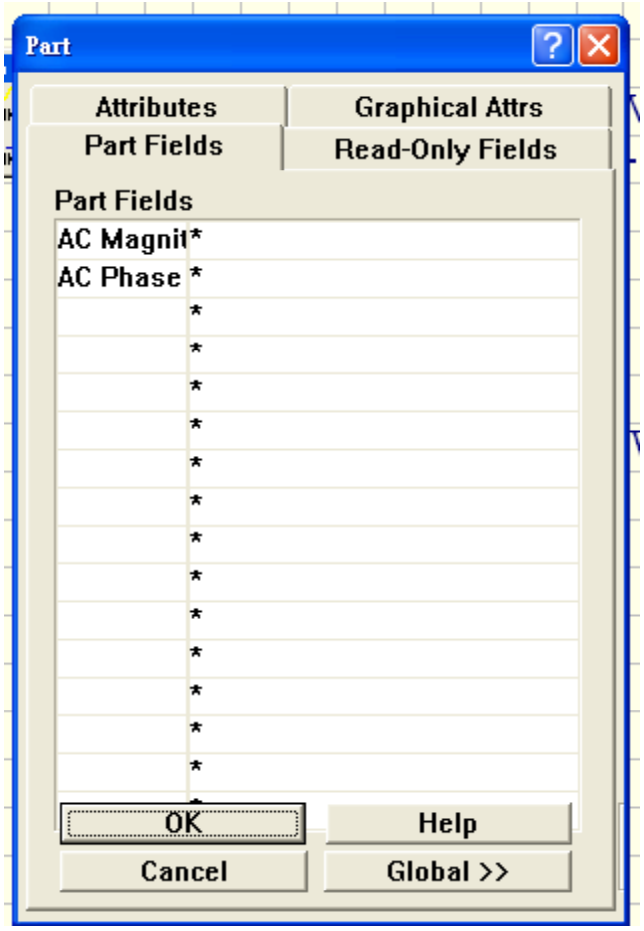
電源元件工具列


Design Explorer 99 SE\Examples\MyDesign.ddb]
Tools Simulate PLD Reports Window Help
esign.ddb Sheet1.Sch Sheet1.nsx Sheet2.Sch
Simulation Sources
V? +5V
V? -5V
V? +12V
V? -12V
V1 VSRC
V2 VEXP
V3 VPULSE
V4 VPWL
V5 VSFFM
V6 VSIN

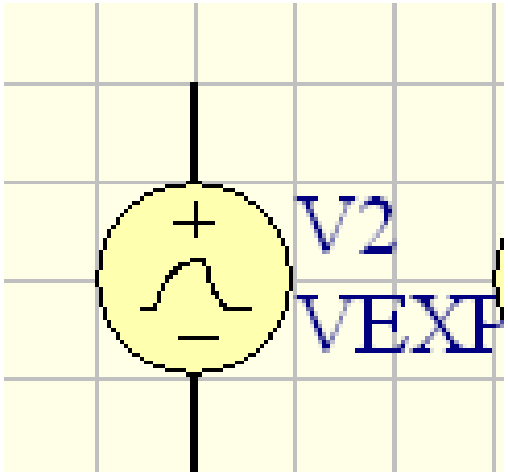
交直流電壓源VSRC

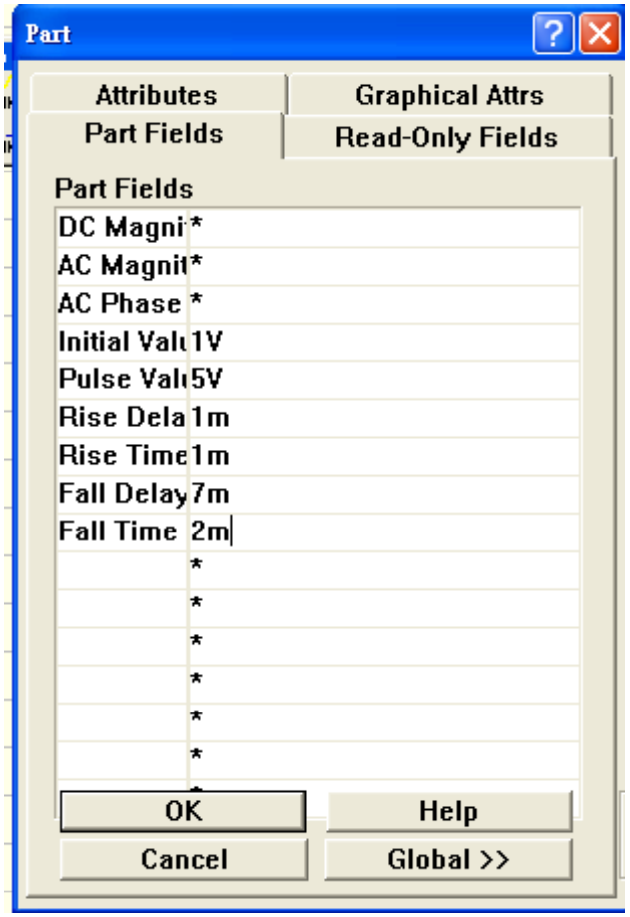

V1
VSRC
+
−


Part
Part Fields
Read-Only Fields
Attributes
Graphical Attrs
Lib Ref
VSRC
Footprint
Designat
V1
Part
+5V
Sheet
*
Part
1
Selection
Hidden Pin
Hidden Fiel
Field Name
OK
Help
Cancel
Global >>

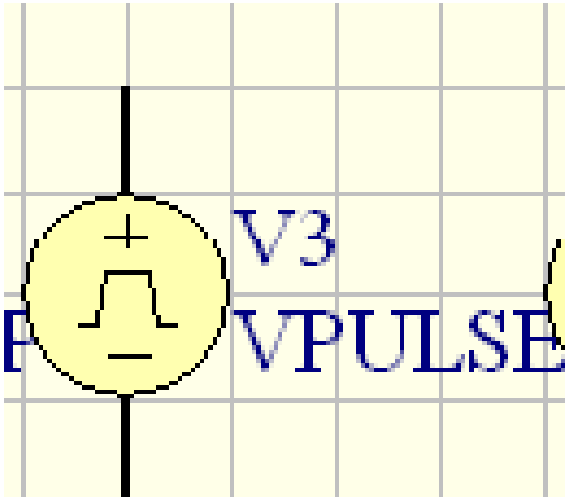

Part
Attributes
Graphical Attrs
Part Fields
Read-Only Fields
Part Fields
AC Magnit
AC Phase
OK
Help
Cancel
Global >>

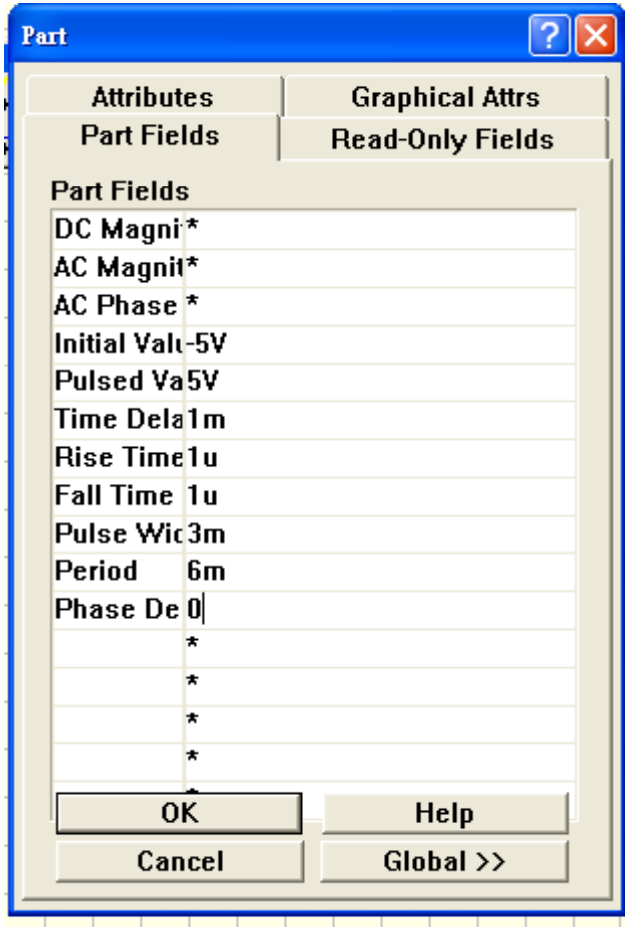
指數波形電壓源VEXP





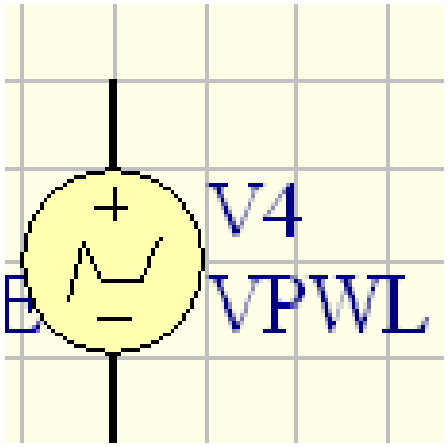
脈衝波形電壓源VPULSE

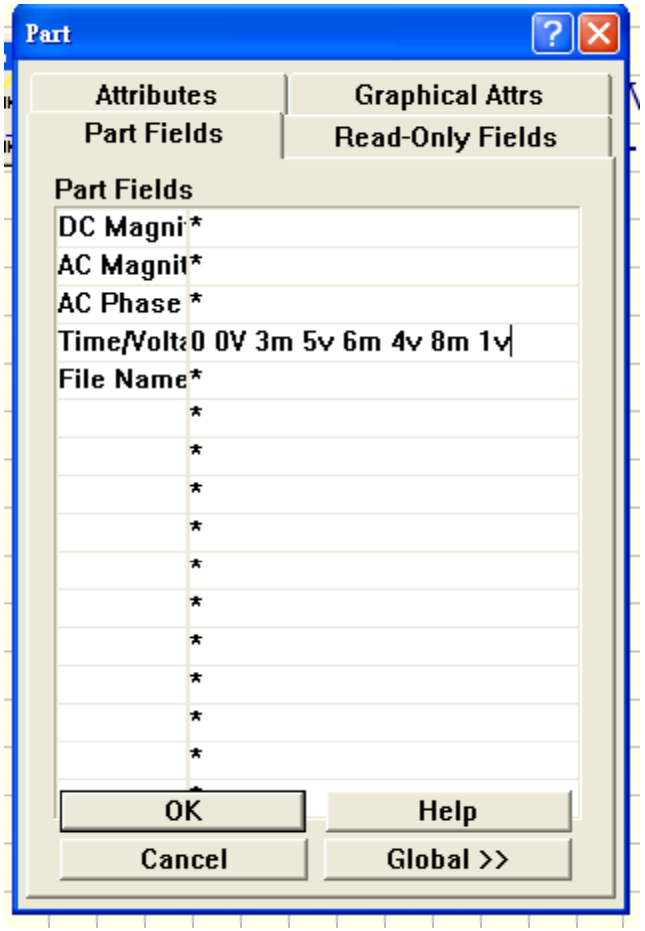




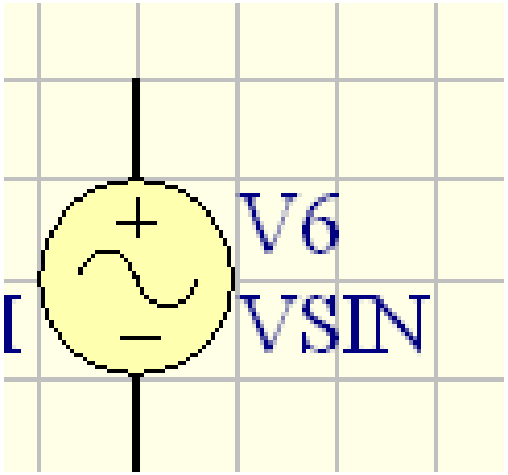
分段線性電壓源VPWL

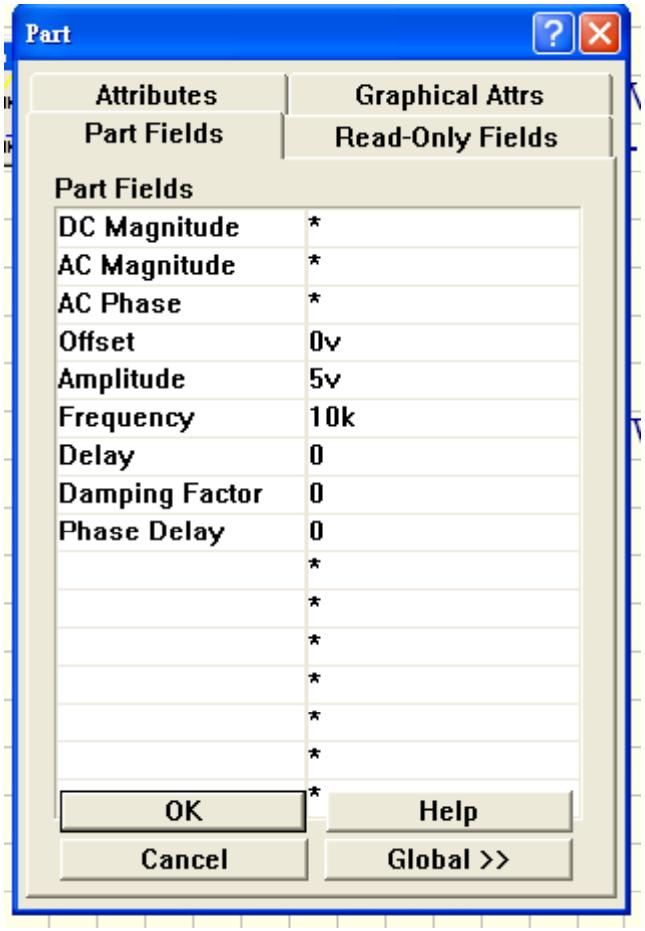
時間 電壓值 時間 電壓值 時間 電壓值



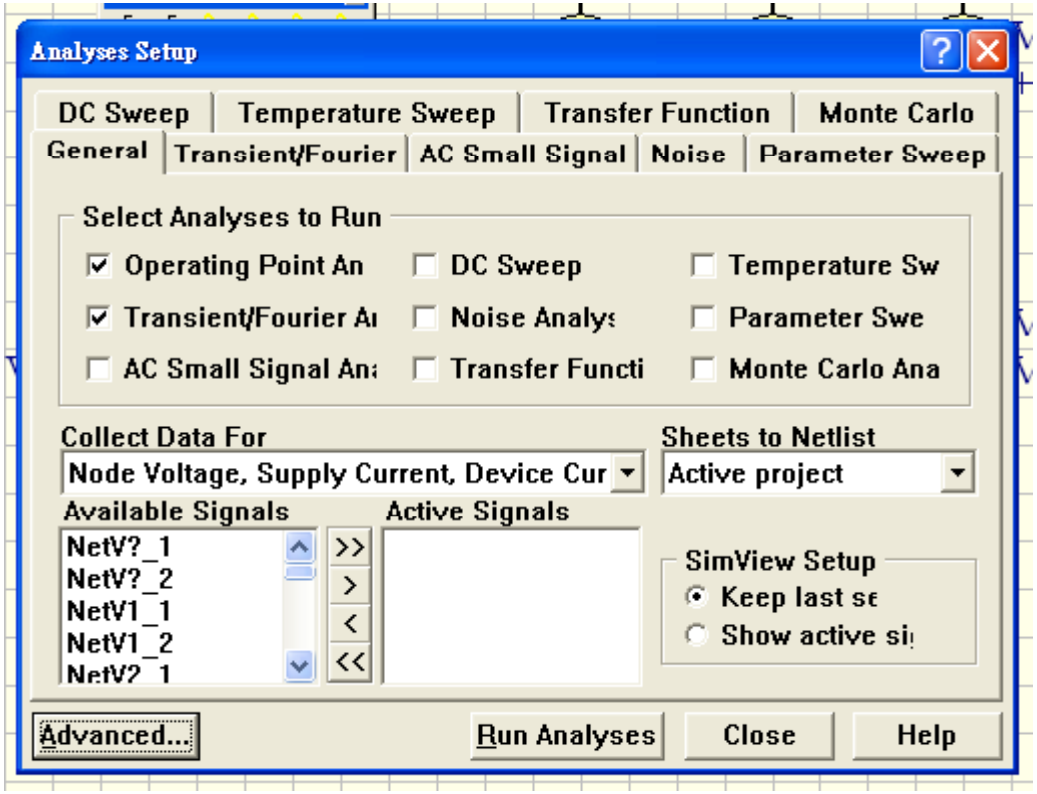


弦波電壓源VSIN

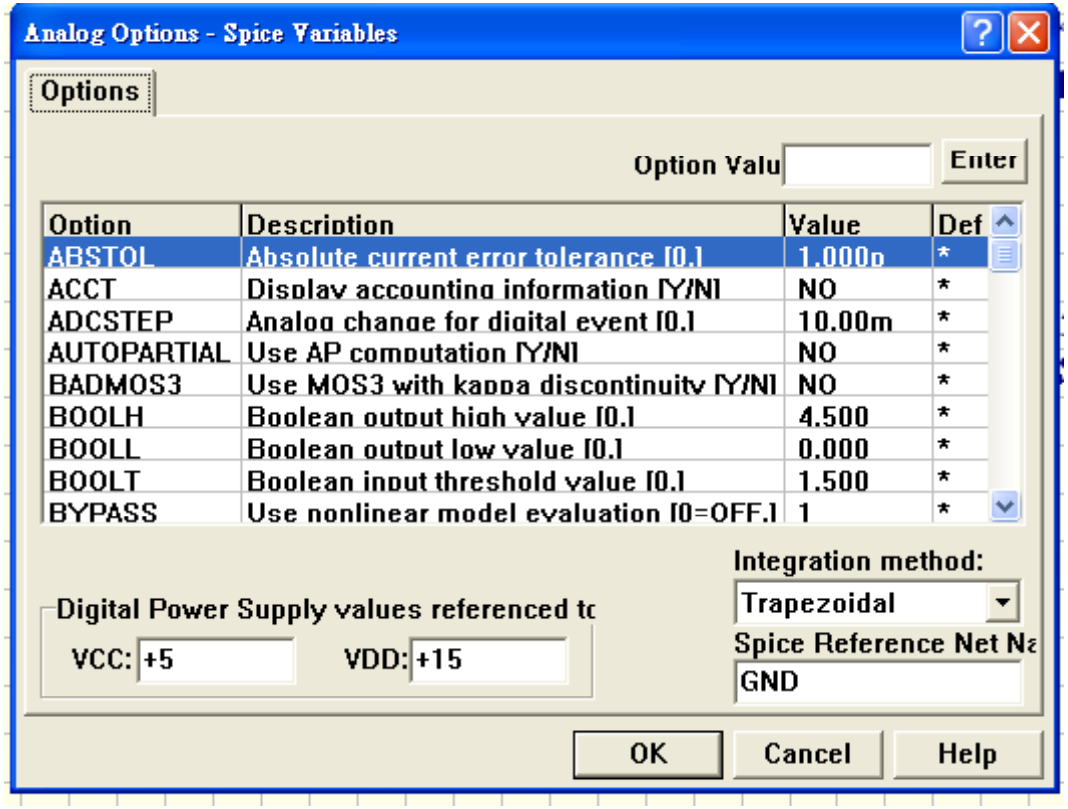

V6
VSIN


Part
Attributes
Graphical Attrs
Part Fields
Read-Only Fields
Part Fields
DC Magnitude *
AC Magnitude *
AC Phase *
Offset 0v
Amplitude 5v
Frequency 10k
Delay 0
Damping Factor 0
Phase Delay 0
OK
Help
Cancel
Global >>

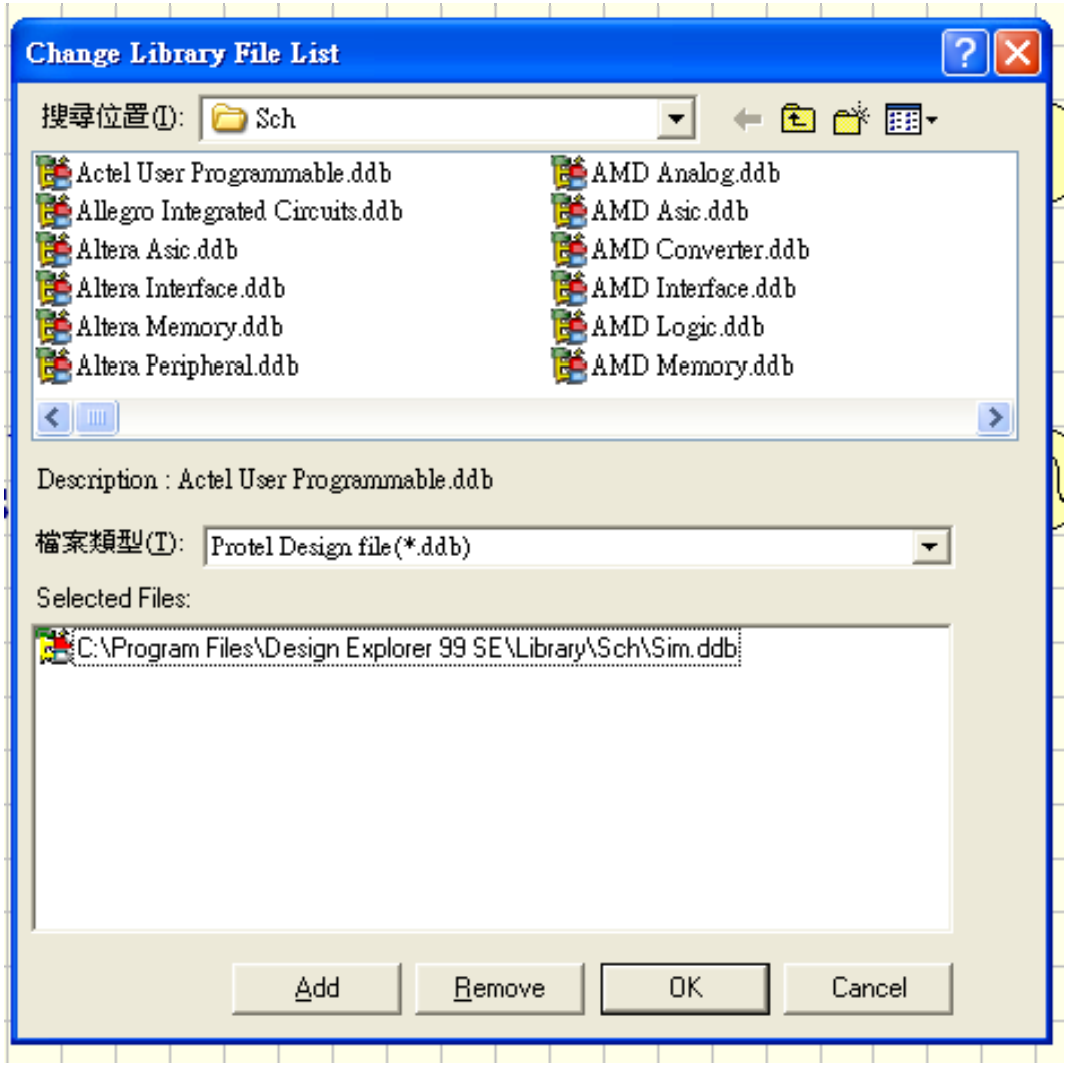
分析設定畫面


Analyses Setup
DC Sweep
Temperature Sweep
Transfer Function
Monte Carlo
General
Transient/Fourier
AC Small Signal
Noise
Parameter Sweep
Select Analyses to Run
Operating Point An
DC Sweep
Temperature Sw
Transient/Fourier Ai
Noise Analys
Parameter Swe
AC Small Signal An
Transfer Functi
Monte Carlo Ana
Collect Data For
Node Voltage, Supply Current, Device Cur
Sheets to Netlist
Active project
Available Signals
Active Signals
NetV?_1
NetV?_2
NetV1_1
NetV1_2
NetV2_1
SimView Setup
Keep last se
Show active si
Advanced...
Run Analyses
Close
Help

參考點接地 GND


Analog Options - Spice Variables
Options
Option Valu
Enter
Option
Description
Value
Def
ABSTOL
Absolute current error tolerance [0.]
1.000p
ACCT
Display accounting information [Y/N]
NO
ADCSTEP
Analog change for digital event [0.]
10.00m
AUTOPARTIAL
Use AP computation [Y/N]
NO
BADMOS3
Use MOS3 with kappa discontinuity [Y/N]
NO
BOOLH
Boolean output high value [0.]
4.500
BOOLL
Boolean output low value [0.]
0.000
BOOLT
Boolean input threshold value [0.]
1.500
BYPASS
Use nonlinear model evaluation [0=OFF.]
1
Integration method:
Trapezoidal
Digital Power Supply values referenced to
VCC: +5
VDD: +15
Spice Reference Net Na
GND
OK
Cancel
Help

使用元件庫


Change Library File List
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Actel User Programmable.ddb
Allegro Integrated Circuits.ddb
Altera Asic.ddb
Altera Interface.ddb
Altera Memory.ddb
Altera Peripheral.ddb
AMD Analog.ddb
AMD Asic.ddb
AMD Converter.ddb
AMD Interface.ddb
AMD Logic.ddb
AMD Memory.ddb
Description : Actel User Programmable.ddb
檔案類型(T):
Protel Design file(*.ddb)
Selected Files:
C:\Program Files\Design Explorer 99 SE\Library\Sch\Sim.ddb
Add
Remove
OK
Cancel