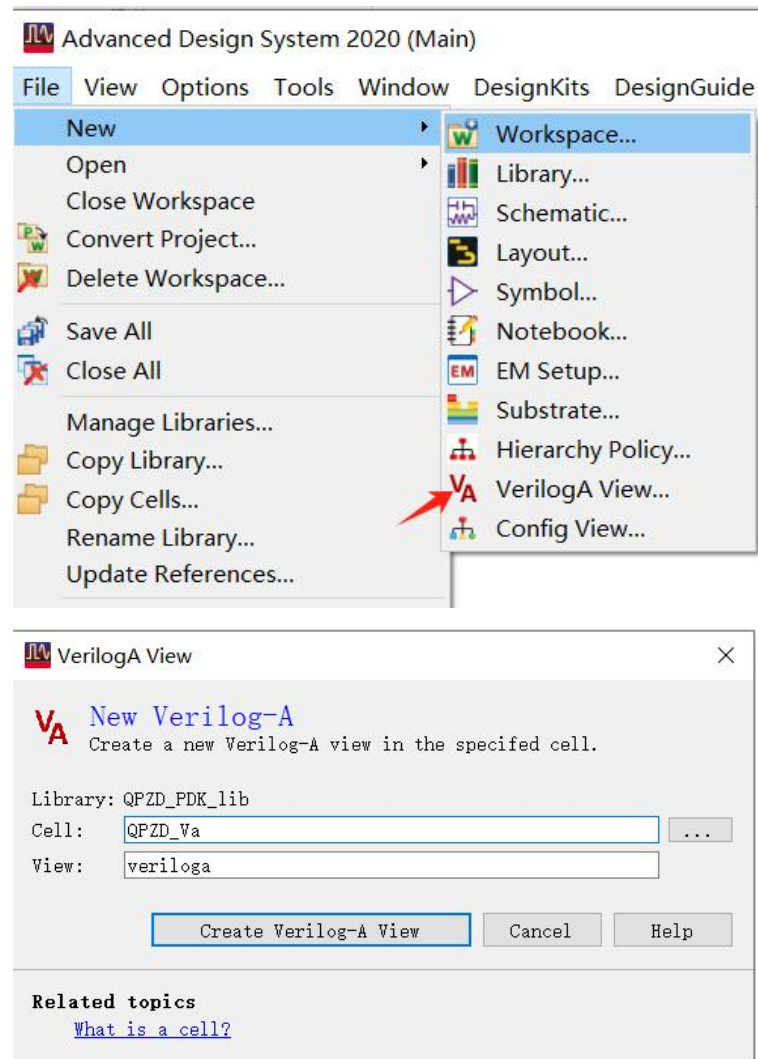


## Method of Loading Va File for QPZD Model

1. Create a Va file in the ADS project.



2. Copy the Va code of the QPZD model to a new Va file.

```
/* QPZD Model Version 1.1
```

```
Project Directors and Developers: Xu group member, University of Electronic  
Science and Technology of China
```

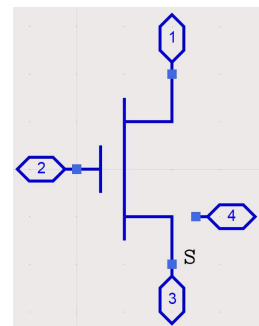
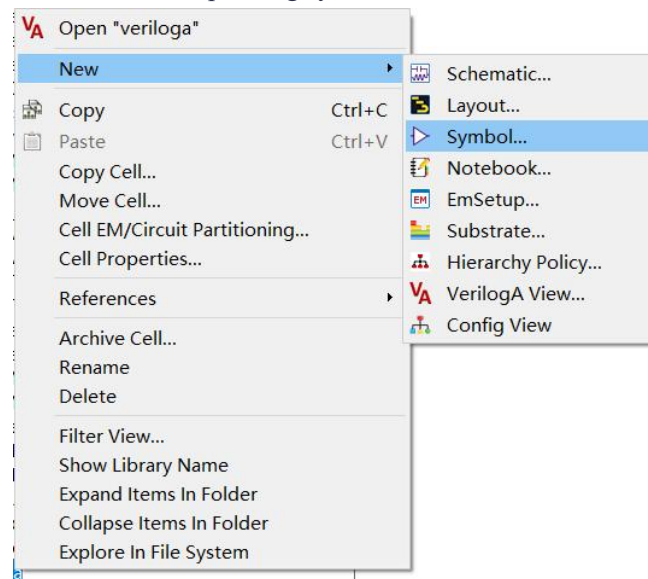
```
QPZD model is supported by the memebrs of University of Electronic Science and  
Technology of China.
```

```
*/
```

```
`include "discipline.h"  
`include "constants.h"
```

```
////////// Numerical and Physical Constants //////////
```

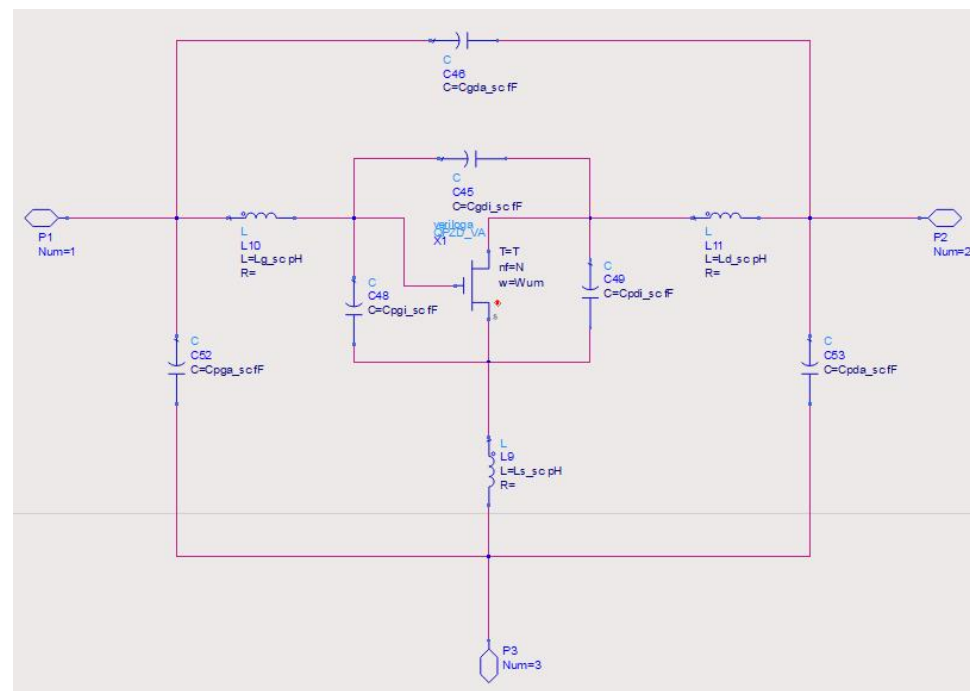
3. Create a corresponding symbol.



```
module qpzdhemt(d, g, s, dt) ;
    inout d, g, s, dt;
    electrical d, g, s, y, c, di, gi, si;
    electrical trap1, trap2;
    electrical ia, ib; // internal nodes to generate noise
    thermal dt;
```

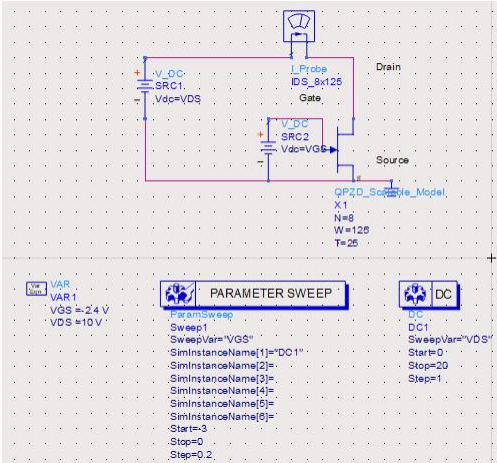
Note: The symbol port name corresponds to the port in the Va file.

4. Create a new symbol containing the intrinsic model with parasitic parameters.



Note: Model Va includes parasitic resistors and only requires external parasitic capacitors and inductors.

5. Model Tuning and Simulation.



Select Parameter

tnom=25.0

T=T

I=0.25e-6

w=Wum

nf=N

epsilon=9.151e-11

dd=25e-9

u0=18895.0e-6

ua=(- 1.206)

ub=0.4407

