xfmr.ece

Attributes

```
mainnodes: p1 n1 p2 n2

stparms: i1_st=0 i2_st=0

rparms: l1=1m l2=1m k=1
```

Description

xfmr.ece is a transformer with one coil between p1 and n1 and the other between p2 and n2. The parameters have the following meaning:

l1: Self inductance of the first coil.

l2: Self inductance of the second coil.

k: Coupling coefficient.

i1_st: "Start-up" value of i1 in startup simulation.

i2_st: "Start-up" value of i2 in startup simulation.

The dashed connection between the two sides (see figure) should be made *externally* in the circuit file if there is otherwise no connection between the two sides. This is required because the circuit as a whole can have only one reference node; if the two sides are completely isolated, a part of the circuit will remain floating, leading to a singular matrix.

The dashed wire does not change the circuit behaviour since it does not carry a current, there being no return path.

AC behaviour is not implemented.