

**Space update  
option -c  
and min\_coup\_cap**

*S. de Graaf*

Circuits and Systems Group  
Faculty of Electrical Engineering,  
Mathematics and Computer Science  
Delft University of Technology  
The Netherlands

Report EWI-ENS 11-07  
October 12, 2011

Copyright © 2011 by the author.  
All rights reserved.

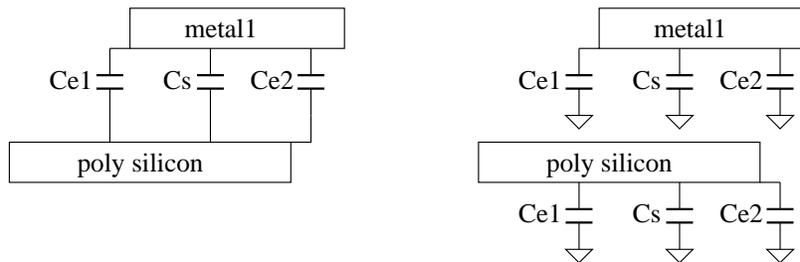
Last revision: October 14, 2011.

## Introduction

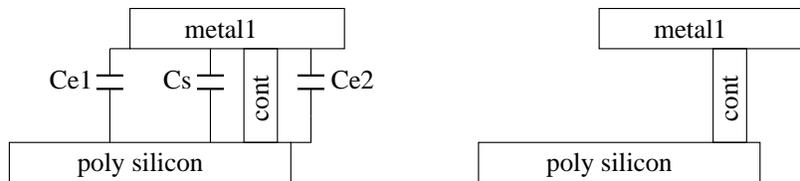
Both updates have in common that it concerns coupling capacitance nodes which are in the same node group.

### Option -c

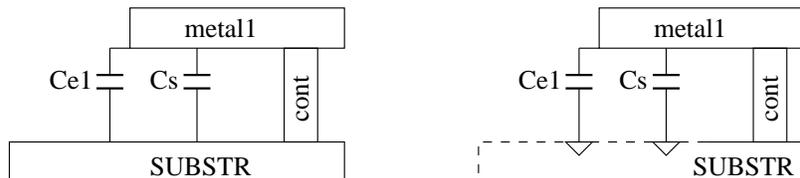
When this *space* extraction option is used to extract capacitances and not option -C and not option -I are used, then all extracted capacitances are connected to the ground node. Thus, when in the technology file surface and edge coupling capacitances are specified, then these capacitances are folded to the ground (GND) node.



Not all coupling capacitances are folded to the ground node. When the node group of the poly silicon conductor is connected with the node group of the metal1 conductor, then the coupling capacitances are omitted.



However, capacitances to the SUBSTR node are not omitted, these capacitances are always connected with the GND node:



### Parameter min\_coup\_cap

The min\_coup\_cap heuristic is changed.