Problem info

Problem type: AC Conduction , frequency: 100000000 Hz,
Geometry model class: Plane-Parallel
Problem database file names:

- Problem: *microstrip_conductivity.pbm*
- Geometry: *Microstrip_conductivity.mod*
- Material Data: *Microstrip_conductivity.dec*
- Material Data 2 (library): *none*
- Electric circuit: *none*

Results taken from other problems:

- *none*

Geometry model

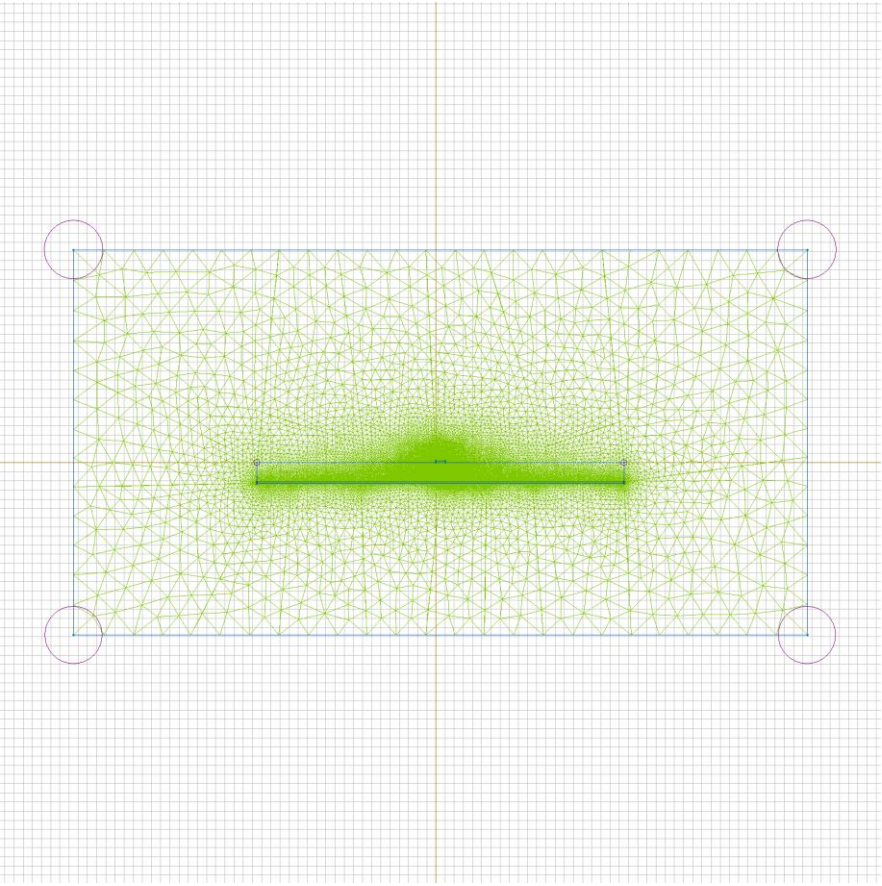


Table 1. Geometry model statistics

	With Label	Total
Blocks	4	4
Edges	3	16
Vertices	0	14

Number of nodes: 50961.

Labelled objects

There are following labelled objects in the geometry model (Material Data file could contain more labels, but only those labels that assigned to geometric objects are listed)

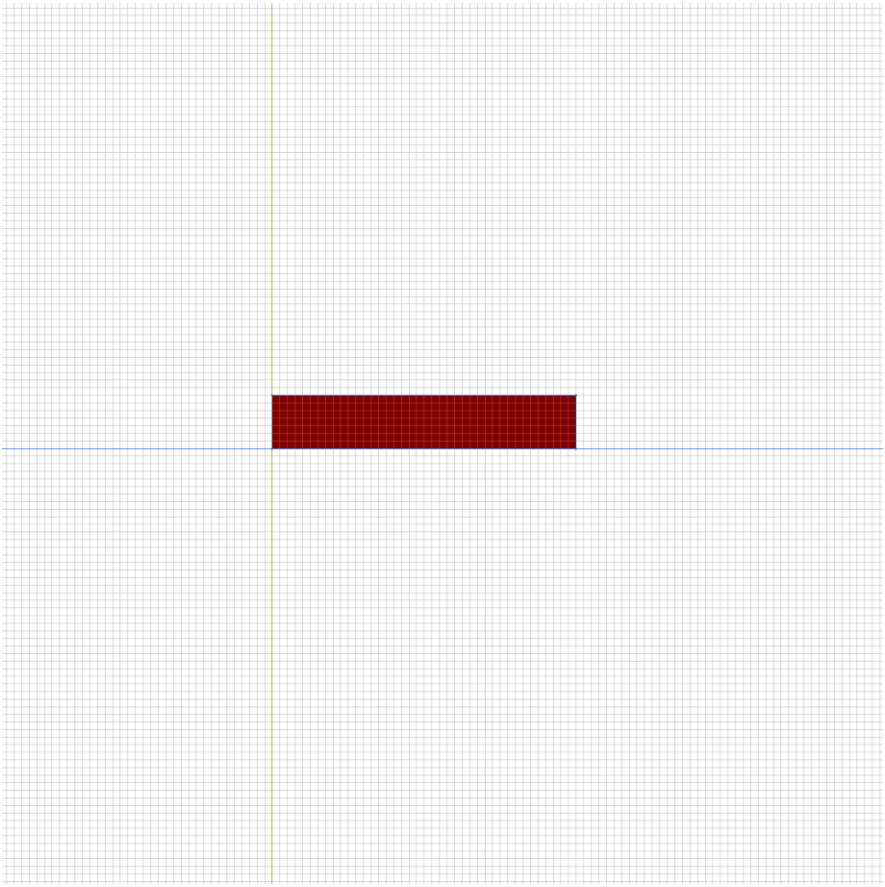
Blocks:	Edges:	Vertices:
• trace1 • ground • air • dielectric •	• V+ • V0 • boundary •	

Detailed information about each label is listed below.

Labelled objects: block "trace1"

There are (1) objects with this label

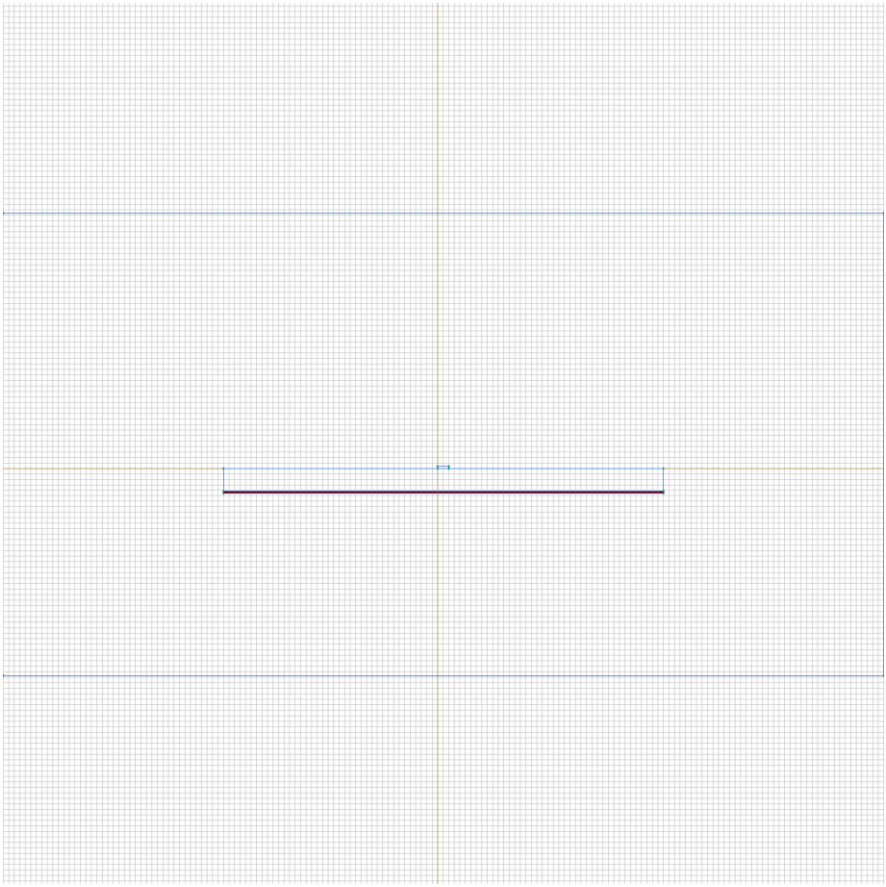
Relative electric permittivity eps_x=1, eps_y=1
Electrical conductivity sigma_x=0 [S/m], sigma_y=0 [S/m]



Labelled objects: block "ground"

There are (1) objects with this label

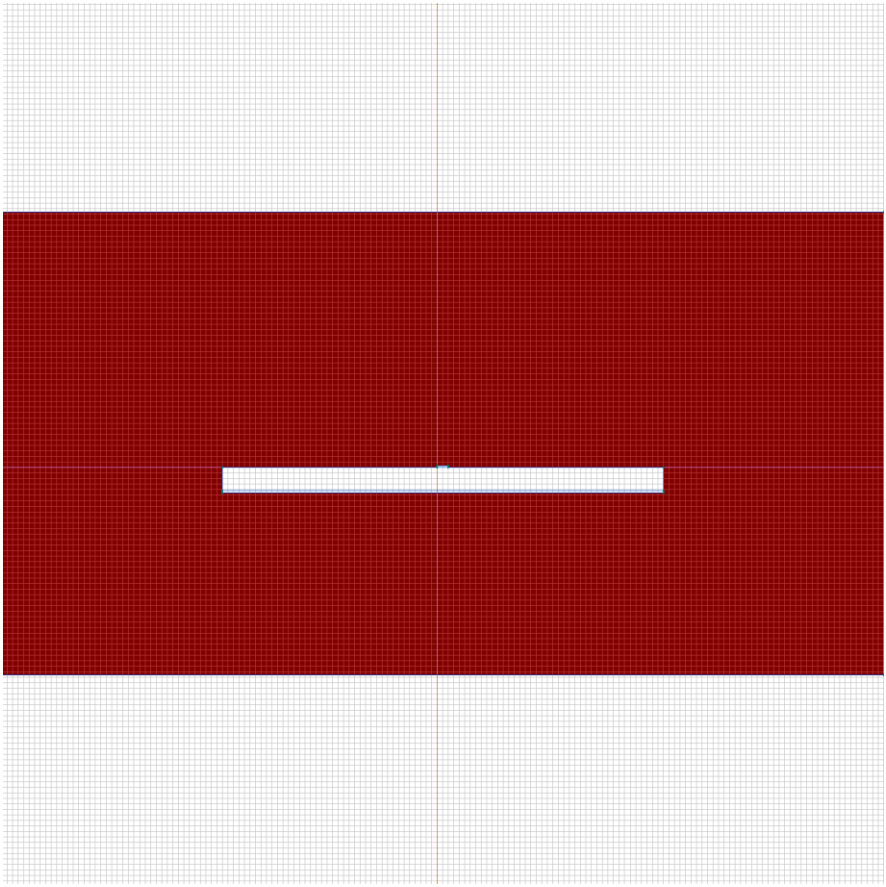
Relative electric permittivity eps_x=1, eps_y=1
Electrical conductivity sigma_x=0 [S/m], sigma_y=0 [S/m]



Labelled objects: block "air"

There are (1) objects with this label

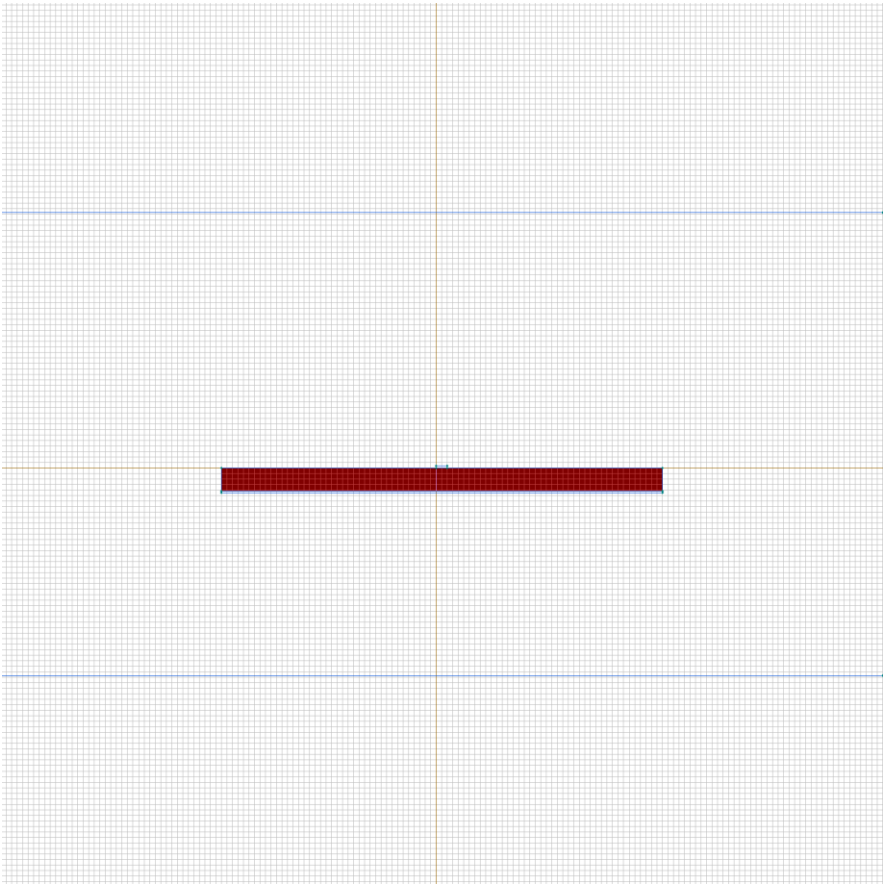
Relative electric permittivity eps_x=1, eps_y=1
Electrical conductivity sigma_x=0 [S/m], sigma_y=0 [S/m]



Labelled objects: block "dielectric"

There are (1) objects with this label

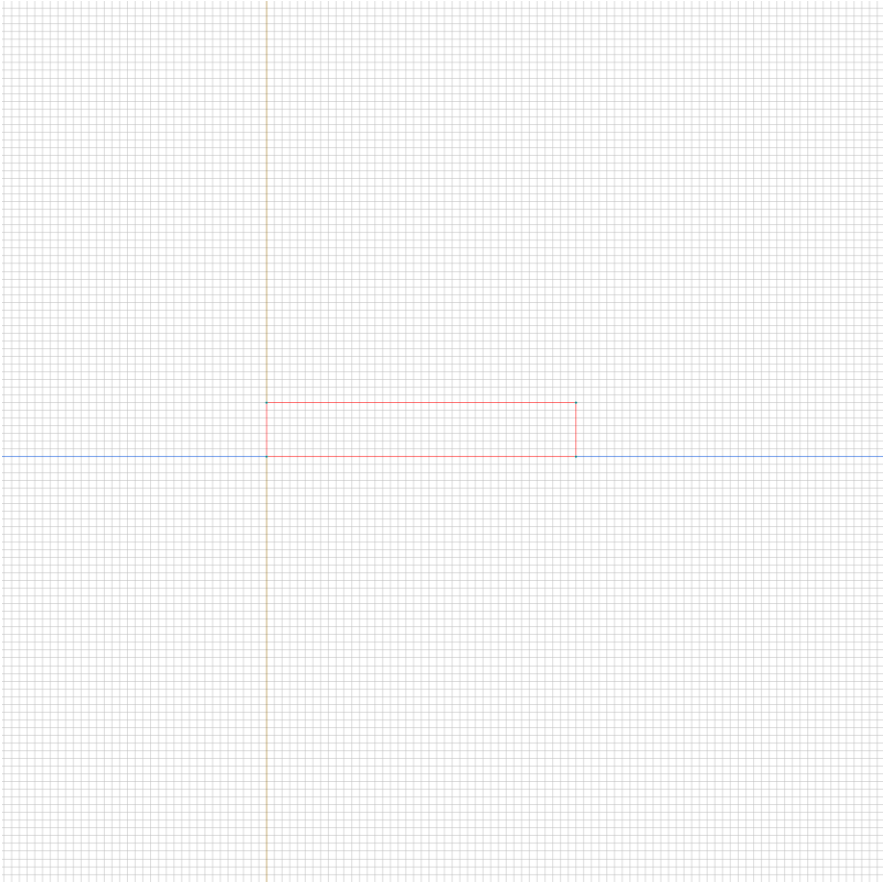
Relative electric permittivity eps_x=4.3, eps_y=4.3
Electrical conductivity sigma_x=0.00043 [S/m], sigma_y=0.00043 [S/m]



Labelled objects: edge "V+"

There are (4) objects with this label

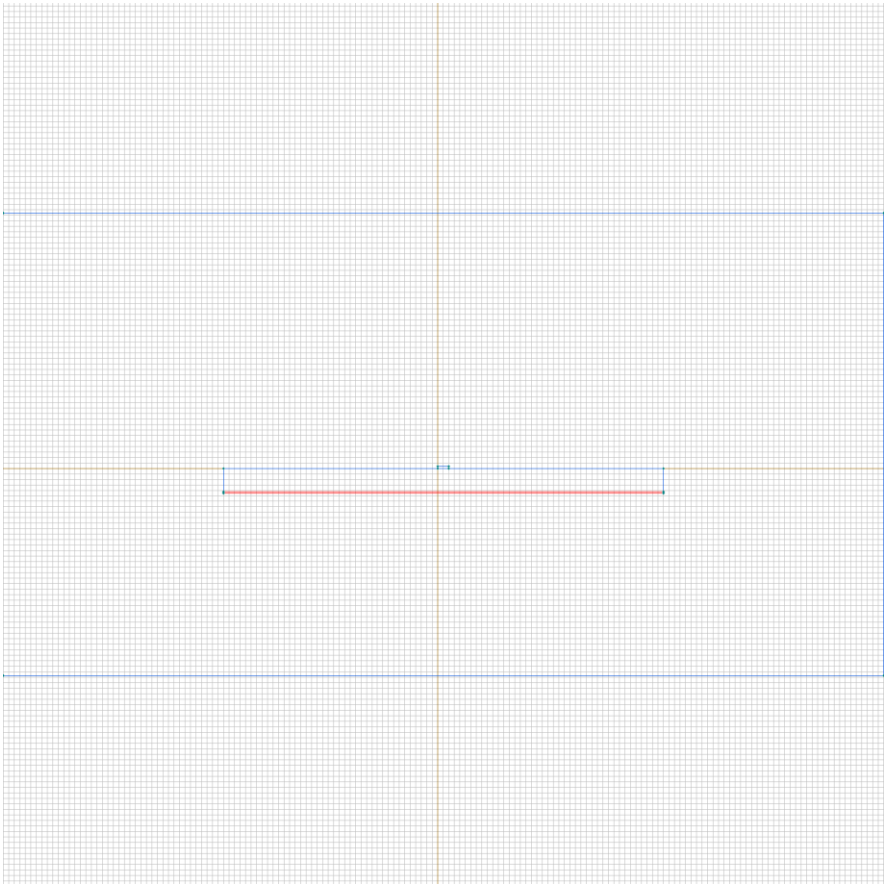
Voltage: U=2 [V], phase 0 [deg]



Labelled objects: edge "V0"

There are (4) objects with this label

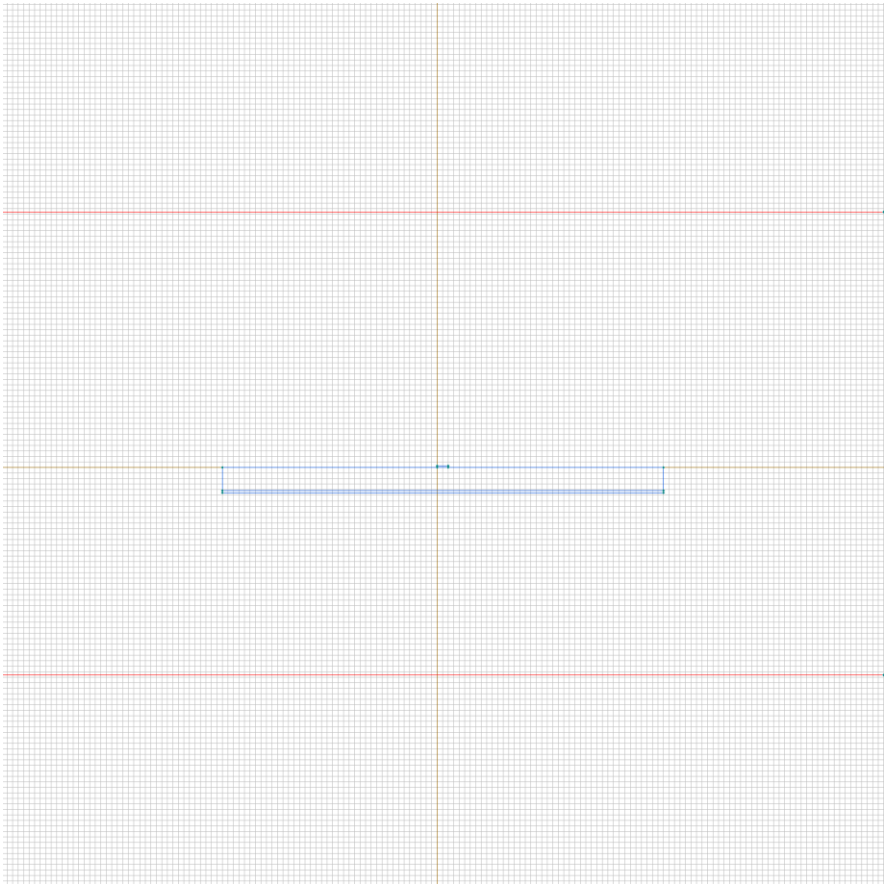
Voltage: U=0 [V], phase 0 [deg]



Labelled objects: edge "boundary"

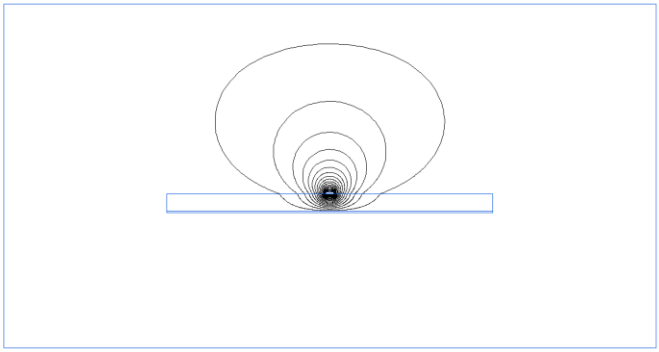
There are (4) objects with this label

Voltage: U=0 [V], phase 0 [deg]



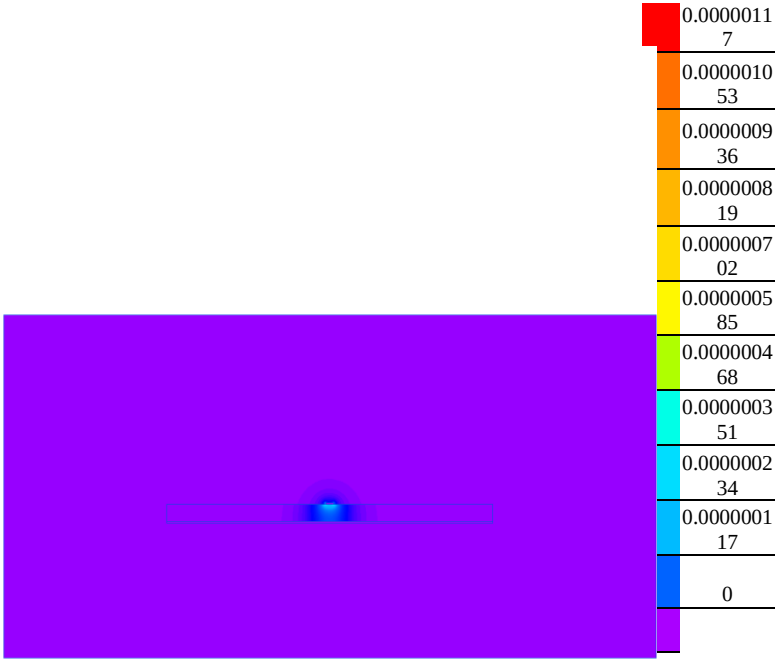
Results

Field lines



Results

Color map of Electric induction |D| [C/m2]



Nonlinear dependencies

No non-linear dependencies are used in this problem data