

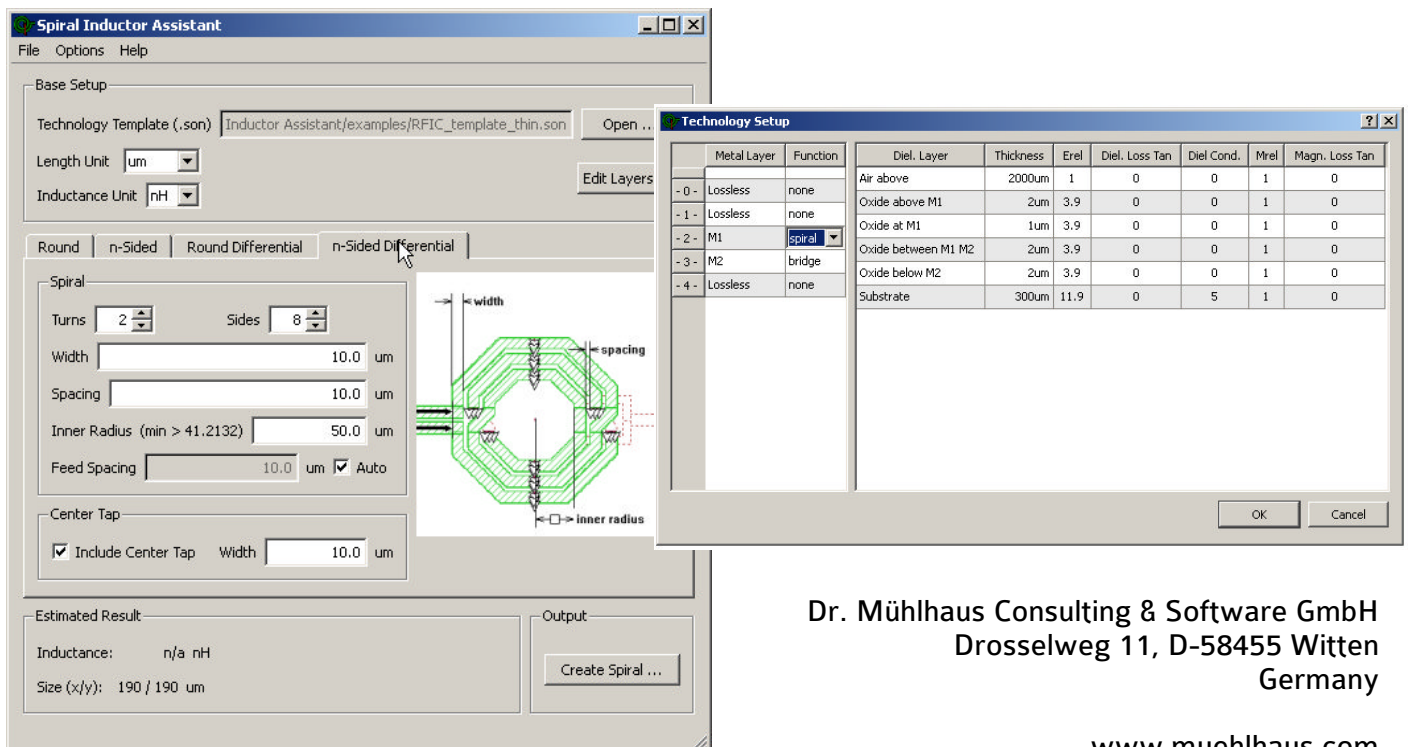
Spiral Inductor Assistant for Sonnet

Benefits

- Fast and accurate on-the-fly design and analysis of single ended and differential inductor layouts
- Complements the accurate and efficient Sonnet Professional RFIC workflow

Key Features

- Generate layouts for various single ended and differential inductors
- Single or multiple parallel layer(s) for spiral and underpass/overpass
- Estimated inductance read-out for single ended spirals while geometry parameters are changed
- Import technology information from existing Sonnet simulation models
- Write a full, complete Sonnet simulation model for accurate EM verification of the inductor, ready for immediate analysis
- Full wave EM analysis in Sonnet Professional provides accurate, calibrated S-parameters (Sonnet license required)
- Plot L, Q, series resistance, substrate resistance and capacitance from the Sonnet results (Sonnet license required)
- Extract a broad band SPICE model for Spectre and other time domain simulators for the inductor (Sonnet license required)
- Available for Windows and Linux platforms



Metal Layer	Function	Diel. Layer	Thickness	Erel	Diel. Loss Tan	Diel Cond.	Mrel	Magn. Loss Tan
- 0 -	Lossless	none	2000um	1	0	0	1	0
- 1 -	Lossless	none	2um	3.9	0	0	1	0
- 2 -	M1	spiral	1um	3.9	0	0	1	0
- 3 -	M2	bridge	2um	3.9	0	0	1	0
- 4 -	Lossless	none	2um	3.9	0	0	1	0
		Substrate	300um	11.9	0	5	1	0