Guide to SonnetLab Examples

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Guide to Examples

The SonnetLab toolbox for Matlab (from here on called SonnetLab) ships with a folder containing a few examples of what can be done using SonnetLab. An explanation of what these demonstration scripts do is provided below:

Antenna Array
   This example will plot the antenna pattern for a series of patch antenna designs
   with varying amounts of separation between patches.
      Written by: Bashir Souid

AntennaDemo   A demo of Matlab modifying and simulating a project
   This function is a demonstration of an realistic use
   for the ability to run SONNET from MATLAB.

   This example will build a Sonnet Project in the form
   of a patch antenna and remove metal patches from it in
   order to get a very high -3dB bandwidth.
      Written by: Bashir Souid

SonnetBanner
   SonnetBanner will make a Sonnet Geometry project
   circuit that will spell out a string using metal polygons
      Written by: Bashir Souid

BeginnerDemo This is an introductory demo of SonnetLab
   This is a very simple demo of how Sonnet projects can be
   built and simulated using Matlab.
      Written by: Bashir Souid

BranchlineCoupler This is a project decompiler example
   This tutorial provides a hands on demonstration of the SonnetLab project
   decompiler. The Sonnet project decompiler will read an existing Sonnet project from
   the hard drive and generate a list of SonnetLab compatible Matlab commands that can
   be used to create a default Sonnet project file that matches the passed project.
   This example will generate a Matlab script that, when run, will create a Sonnet
   project file on the hard drive matching the passed Sonnet project file.
      Written by: Bashir Souid

CircularSpiralBuilder This is an introductory demo of SonnetLab
   This function will build a Sonnet project with an
   n turn spiral inductor.
      Written by: Bashir Souid

Cross Section Plot
   This example will plot JX and JY data for a project at a
   location specified by the user.
      Written by: Bashir Souid

Farfield Data Export and Plot This is an introductory demo of Pattern tools
   This simple example will open a Sonnet project file with SonnetLab,
   export the farfield pattern data to an output file (the project

is automatically simulated if necessary) and will produce a 3D
plot of the pattern data at 2.4 GHz.
        Written by: Bashir Souid

Interdigitated Filter This is a project decompiler example
  This tutorial provides a hands on demonstration of the SonnetLab project
  decompiler. The Sonnet project decompiler will read an existing Sonnet project from
  the hard drive and generate a list of SonnetLab compatible Matlab commands that can
  be used to create a default Sonnet project file that matches the passed project.
  This example will generate a Matlab script that, when run, will create a Sonnet
  project file on the hard drive matching the passed Sonnet project file.
        Written by: Bashir Souid

 JXY Beginner Demo
   This example demonstrates various JXY export options. This is
   intended to be an introductory tutorial.
        Written by: Bashir Souid

 LayerDemo   A demo of Matlab modifying and simulating a project
   This function is a demonstration of an realistic use
   for the ability to run SONNET from MATLAB.

   This function will read in a Sonnet Project representing
   an antenna. This antenna will be made of many
   square metals in a grid. This function will modify the
   level that individual patches of the antenna reside on.
        Written by: Bashir Souid

 CircularSpiralBuilder This is an introductory demo of SonnetLab
   This function will build a Sonnet project with an
   n turn spiral inductor.
        Written by: Bashir Souid

 Yield Analysis This is an introductory demo of SonnetLab
   This script demonstrates how SonnetLab can be used for tolerance analysis.
   The proposed approach utilizes a combination of high accuracy em
   simulations along with interpolated data from many Monte Carlo method
   derived samples over the variable tolerance ranges.
        Written by: Bashir Souid

Contact

Your feedback is important to us. If you have any questions or comments about SonnetLab, please contact Sonnet Support by email at support@sonnetsoftware.com.

Please make sure you are using the most up to date version of SonnetLab before submitting a bug report. When submitting a bug report please include the Sonnet project file that generated the error (Sonnet project files have the extension .son) and the output from the command "SonnetMatlabVersion". The more information that that we receive the faster it will be for us to resolve the issue and contact you back.