

PLL Test course **Course Map.**

Author Details:

Dr. Martin John Burbidge

Lancashire
United Kingdom

Tel: +44 (0)1524 825064

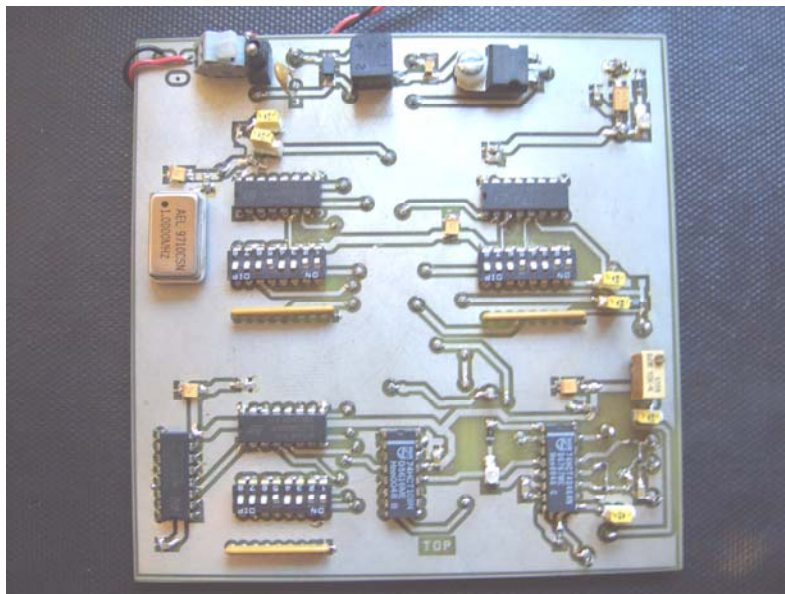
Email: martin@mjb-rfelectronics-synthesis.com
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Document Priority: Normal:

Associated Documents: All of the course material

Purpose:

This document is used to outline the suggested reading order for the course material related to the PLL test demonstration course.



Course Overview:

This PLL test course consists of simulation models and physical hardware that will allow the student to experiment with typical PLL characterisation type tests. Although the primary focus of the course is towards measurement of specific PLL parameters, it is also hoped that the course material will provide a basic insight into phase locked loop operation. Further aims and objectives for the course are provided in the material relating to specific course modules.

Throughout the course it would be beneficial to have access to the following texts.

- Phase-Locked Loops; Design, Simulations and Applications; Roland E. Best Fourth Edition; McGraw-Hill { 1 }.
- Phaselock Techniques; Floyd M. Gardner; Second Edition; Wiley Interscience. {2}
- 74HC/74HCT4046A Phase-Locked-Loop with VCO, Philips Semiconductors Data Sheet.

Ideally the course material should be read in the following manner.

Document	Brief description
PLLSimEqn.pdf	Provides an overview of PLL operation and also provides references to simulation tools and models that can be used to carry out experiments similar to those carried out in the practical sessions. This document should be read in conjunction with the practical modules prior to attending the practical course.
Appendix1.pdf	Contains important information relating to the test hardware. This should be read prior to carrying out any of the practical exercises.
PLLPracticalBasicTest.pdf	This contains instructions for basic functional tests relating to the PLL hardware board. This should be carried out as the first practical exercise.
PLLPracticalTest_VCOgain.pdf	Explains and demonstrates simple VCO measurement techniques.
PLL_PhaseTransfer.doc	Explains and demonstrates how to carry out PLL phase transfer measurements.
PLLPracticalTest_StepResponse_4.pdf	Explains and demonstrates how to carry out PLL step response measurements.

Various simulation files are also included and these are referred to in the relevant texts.