台灣自行開發的繪圖軟體畫analog circuit的結果

李家同

以下的圖都是由靜宜大學的學生用Violet繪圖軟體畫的，Violet繪圖軟體是靜宜大學吳賦哲教授發展出來的。每一張圖都有一個是原來李家同教授用Visio畫的，這是李教授analog circuit講義中的圖。我們可以說，吳教授所發展的系統絕對可以和Visio相比，毫無遜色。希望全國需要畫圖的人，都用本土發展的Violet繪圖軟體。在以下的網站可以找到Violet繪圖軟體

<http://toreal.github.io/Violet/intro.html>

 吳賦哲教授的E-mail是fcwu@pu.edu.tw

[Chapter 01 The Metal-Oxide Semiconductor Field Effect Transistors.doc](http://t14.ecp168.net/file_view.php?fobj_path=vgMi83My8xNTU1NjU5LzAvNDY0NjkxMi9TVUIwMDM3UU8vWlowMDM5TzEu&fobj_name=Chapter+01+The+Metal-Oxide+Semiconductor+Field+Effect+Transistors.doc)

參考圖:



Fig. 1.6-19  A PMOS circuit for Experiment 1.6-8

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Fig. 2.5-2  The amplifier circuit with  for Experiment 2.5-1

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參考圖:

 Fig. 3.10-2  A rail to rail comparator

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[Chapter 04 The Differential Amplifiers.doc](http://t14.ecp168.net/file_view.php?fobj_path=vgMi83My8xNTU1NjYzLzAvMTYyNTgwNDgvU1VCMDAzN1FPL1paMDAzOU8wLg==&fobj_name=Chapter+04+The+Differential+Amplifiers.doc)

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Fig. 4.1-11  The differential amplifier circuit for Experiment 4.1-1

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Fig. 5.2-1 A two-stage differential amplifier

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(b) The small signal equivalent circuit for the cascoded amplifier

Fig. 6.2-1  The AC analysis of the cascoded amplifier

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參考圖:



Fig.7.1-1. A transistor circuit as an inverter.

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參考圖:



Fig. 9.1-12 The one-shot circuit for Experiment 9.1-3

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Fig. 10.2-1  A simple sinusoidal oscillator circuit with *RLC* feedback

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Fig. 11.1-3 An *RC* band-pass filter

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Fig. 12.1-2  A small signal equivalent circuit with capacitors considered

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Fig. 13.1-1  A mixer with carrier circuit

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Fig. 14.1-1  An inverter circuit

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[Chapter 15 The Frequency Divider.doc](http://t14.ecp168.net/file_view.php?fobj_path=vgMi83My8xNTU1NjM2LzAvODczOTg0MC9TVUIwMDM3UU8vWlowMDNBMjYu&fobj_name=Chapter+15+The+Frequency+Divider.doc)

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Fig. 15.1-6  The divide by 2 frequency divider with

two inverters added after the clock

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Fig. 16.1-5  Half-transparent register (HT register)

Table. 16.1-2 shows the state diagram of the HT register circuit.

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Fig. 17-1  The basic low drop out circuit

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Fig 18.1-5 The circuit for Case 2

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Fig 19.2-3  A **Saw-tooth Wave Generator**

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