

Practical RF PCB Design: Wireless Networks, Products and Telecommunication

Date: 19-20 March 2012

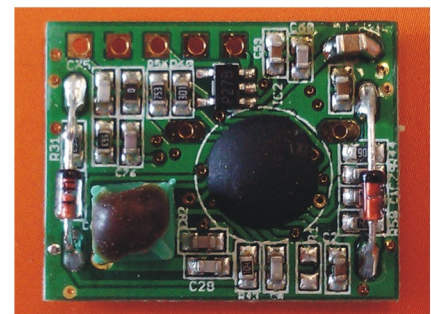
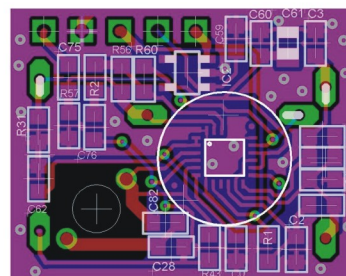
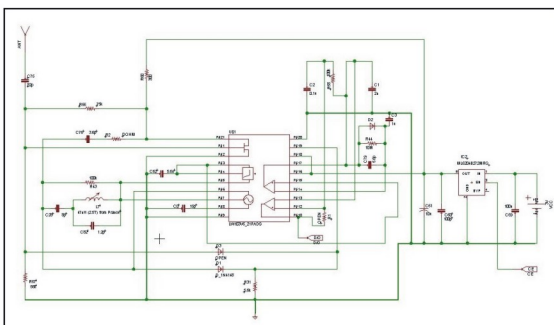
One of the most demanding consumer products in the market is the wireless telecommunication product. A well-designed Radio Frequency Printed Circuit Board (RF PCB) contributes significantly to the success of any wireless product as the layout of the PCB greatly affects the performance, stability and reliability of the product. In today's highly competitive wireless products market with increasingly compressed development time-frame, there is a strong demand for RF professionals who possess the knowledge and experience to design top-performing RF PCBs in less number of iterations. What matters is whether your level of competence is up to the required standard to meet such demand.

Audience:

RF Designers, Wireless Product Designers, Field Application Engineers, Design Managers and related professionals.

Benefits:

This course aims to provide participants with an insightful training on RF PCB design from a practical, industrial perspective. Participants will be led through a systematic, theoretical presentation with case studies on commercial products in the training. The course will be conducted by an RF expert with rich industrial experience. It is suitable for RF professionals who want to keep up-to-date their skills and knowledge in RF PCB design and stay competitive.



Outline

1. Printed circuit board design for RF circuits

- From product design, circuit design to PCB design
- Layer stack-up assignment
- Grounding methods and techniques
- Interconnects and I/O
- Bypassing and decoupling
- Partitioning methods

2. Printed circuits board design for other circuits

- Clock circuits
- Base-band circuits
- Audio circuits
- Switching regulator circuits
- Impedance-controlled circuits
- Daughter cards and Backplanes

3. PCB design for EMC/EMI compliance

- Standards: US and ETSI
- EMC, EMI and ESD compliance
- Grounding methods
- Decoupling methods
- Shielding methods

4. Additional Design Techniques

- Production concerns
- Systematic product design approach
- Connectors
- How to select ferrite device
- Other RF concerns
- Casing design

5. Case studies

- Cellphone
- TV Tuner
- Long range communication system
- RFID
- GPS device
- Microwave sub-system

Instructor:

Henry Lau received his M.Sc. and MBA degrees from UK and USA respectively. He has more than 21 years of experience in designing RF systems, products and RFICs in both Hong Kong and US. He worked for Motorola and Conexant in US as Principal Engineer on developing RFICs for cellular phone and silicon tuner applications. Mr Lau holds five patents, all in RF designs. He is currently running Lexiwave Technology, a fabless semiconductor company in Hong Kong and US designing and selling RFICs, RF modules and RF solutions. He has also been teaching numerous RF-related courses internationally.

Medium of Instruction: English**Course Information:**

Date : 19-20 March 2012 9:30-17:00
Venue : Ngee Ann Polytechnic, Singapore
<http://www.street-directory.com/ngeeann/>
Course Fee : US\$320/US\$288 (Enroll on or before 24 February 2012)
Cancellation : the organizer reserves the right to cancel the course if the number of paid registration is less than 10.

General Enquiry:

Mr. Yeo Chor Lee
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Ngee Ann Polytechnic
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Mr. Henry Lau
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Registration and Payment:

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Tel: (852) 2144-2592 Fax: (852) 2144-2595
Email: henry.lau@lexiwave.com

Enrollment method:

Complete the enrolment form and send by email to henry.lau@lexiwave.com or fax to (852) 2144-2595

Payment method:

Paypal, wire transfer or money order