

Chang-Pao, Chang

E-mail: chang.chang.bao@gmail.com
Cell: 886-915646091
Address: No.152, Ln. 201, Dongning Rd.,
Tainan City 701, Taiwan (R.O.C.)

EDUCATION

National Taiwan University (NTU), Taipei, Taiwan

- Bachelor of Science in Electrical Engineering (GPA 81.99/100, 3.7/4.3 Ranked 142 of 224) 09/2006 – 06/2010
- Master of Science in Communication Engineering (GPA 4.29/4.30, Ranked 5 of 114) 09/2011 – 06/2013

PROFESSIONAL EXPERIENCE

- **Taiwan Semiconductor Manufacturing Company (TSMC), Taipei, Taiwan.** 07/2012 – 09/2012
Position: Intern, Dept. of PDK, Division of DTP (Design Technology Platform)
 - Analyzed and developed electrical model in Process Design Kit (PDK) for radio frequency (RF) IC in sub-micron process.
 - Developed Electrical Model for Three-Dimensional IC (3D IC).
- **National Taiwan University, Dept. of Electrical Engineering, Taipei, Taiwan** 07/2013 – Now
Position: Executive Assistant
Project: *3D Transistors and 3D Interconnects for Advanced VLSI System*, National Science Council.
 - Managing team of five different fields: nano-electronic, material science, thermal & mechanical engineering, computer-aid design, electromagnetic design.
 - Analysis and design of clock distribution network in 3D IC considering thermal and stress effect.
 - Developing parallel computer network for very large scale electromagnetic simulation.

PUBLICATION

- Y.-C. Tseng, **C.-B. Chang**, C.-K. Tang, C.-H. Cheng, Y.-C. Lu, K.-Y. Lin, T.-L. Wu, and R.-B. Wu, "Design considerations for radio frequency 3DICs," in 2012 IEEE Electrical Design of Advanced Packaging and Systems Symposium (EDAPS), 2012, pp. 197–200.
- K.-B. Wu, **C.-B. Chang**, M.-C. Wu, R.-B. Wu, "Simplified Array Model of Vertical Interconnect in Through-Silicon-Via Application," in 2013 Asia-Pacific Radio Science Conference (AP-RASC), 2013.
- **C.-B. Chang**, T.-Y. Huang, M.-C. Wu, R.-B. Wu, "Inductance Modeling of TSV for time domain simulation," in 2013 Asia-Pacific Radio Science Conference (AP-RASC), 2013.
- K.-Y. Yang, **C.-B. Chang**, T.-Y. Wu, W.-S. Wang, Y.-H. Lin, R.-B. Wu, "Modeling and fast eye-diagram estimation of ringing effects on branch line," *IEEE Trans. Compon. Packag. Manuf. Technol.*

PROJECTS

- **AVerMedia** 09/2011 – 12/2011
Modeling of power-ground planes and optimization of decoupling capacitors
 - Integrated optimization algorithm into commercial tools.
- **Taiwan Semiconductor Manufacturing Company (TSMC)** 09/2011 – 02/2012
Modeling, Simulation, and Design for TSV Interconnects & Substrate Noise Coupling in 3D IC Stacking Application.
 - Developed efficient methods to model three-dimensional integrated circuit (3D IC).
- **National Science Council, Taiwan (R.O.C)** 09/2011 – 06/2013
Signal Integrity Analysis and Design in 3D IC Packaging
 - Developed a fast power/signal/ground through silicon via placing algorithm in 3D IC integration
- **National Science Council, Taiwan (R.O.C)** 09/2012 – 06/2013
3D Transistors and 3D Interconnects for Advanced VLSI System
 - Developed an efficient modeling method for very-large TSV array using cylindrical function.
- **MediaTek (MTK)** 02/2012 – Now
Electrical Modeling and Design for TSV array in Wide IO
 - Analyzed electrical model in electromagnetic and semiconductor aspect.
 - Developed efficient tools and methods for next generation 3D stacking memory.

SELECTED EXTRACURRICULAR

2006-2009, Member, Swimming Team, NTU.
2009-2010, Captain, Swimming Team, NTU.

SKILLS

Languages: Mandarin (Native Fluency); English (Excellent Fluency); Taiwanese / Japanese (Basic Fluency)
Computer programming: C, C++, HTML, JavaScript, VBScript, Matlab®, Wolfram Mathematica®