



10GHz instantaneous bandwidth. A scale model for the AWG for proof of concept has been developed. I was primarily responsible for the digital/analog converter (DAC), and amplifiers design. Our In-house transferred-substrate InP HBT will be implemented in year 2004 to boost the speed of AWG.

**May/2002 ~ Aug/2002 MediaTek Corporation, Florida Research Lab**

**Intern/Hardware Engineer**

PA (power amplifier) layout and matching network design for GSM/DCS/PCS tri-band handset. Next generation PA for EDGE and WCDMA systems was also investigated and simulations were done by AWR Microwave Office and Matlab Simulink.

**Aug/2001 ~ May/2002 UW-Madison VdW Lab VNA Project**

**Research Assistant**

Cost effective vector network analyzer design using frequency translation technique was investigated.

**May/2001 ~ Aug/2001 Intel Corporation, Texas Development Center**

**Intern/Design Methodology Engineer**

Working on the interconnect optimization algorithm and tool development, which would be merged into Intel internal EDA tool Tango/Salsa. The algorithm was based on a dynamic programming framework using the techniques of repeater insertion, gate sizing, and repeater sizing.

**May/1999 ~ July/2000 Philips Research East Asia – Taipei (PREAT)**

**Research Engineer** of ESSR (Speech recognition for Embedded System) team.

- 1) Development of ASR (Automatic Speech Recognition) module based on SPHERIC DSP, which was embedded in DVD and SVCD platform.
- 2) Wireless Speech Transmitter. Solutions both by RF and Infrared via IIS protocol were developed.
- 3) User Interface design for voice control system, a joint project with NTUST (National Taiwan University of Science and Technology).
- 4) Acoustic labs setup and study on the acoustic characteristics of ASR-applied environment.

**June/1998 ~ May/1999 Philips Business Unit Monitor**

**R/D Engineer.**

- 1) Monitor circuit design.
- 2) Motorola 6805 assembly coding to control sync signals, OSD, etc.

3) WBT (Window-based Terminal) project: First WBT prototype was based on MIPS platform/WinCE OS; the 2nd generation was based on x86 platform/WinCE OS.

### **Publication**

1. C.-C. Yen, D.W. van der Weide, "**Passive-core Architecture For High Speed D/A Converters**" submitted to IEEE/MTT-S International Microwave Symposium Conference, 2004.
2. S.-J. Ho, M.-K. Choi, C.-C. Yen, K.-O. Sun, H.-J. Kim, D.-H. Kim, and D.W. van der Weide, "**OPTIARB: Arbitrary Optical Waveform Generation Using Electronic Techniques**" 28th Annual GOMACTech Conference, 2003.
3. C.-C. Yen, C.C.-P. Chen, "**Zero Clock Skew With Optimized Wire Sizing**" submitted to Design Automation Conference, 2002.

### **Computer & CAD Skills**

Agilent Advanced Design System (ADS), Ansoft HFSS, LabView, Synopsys Medici TCAD, Cadence IC design tools, Matlab, C/C++ and Java programming.

### **Language Skills**

Chinese, English, German(3years).