

Summary

PJK LABS LLC provides specialized RF design support services at the component level.

RF consulting for all phases of development including feasibility, architecture, detailed design, layout, non-linear and linear simulation including EM simulations.

Subject Matter Expert

Emphasis on feasibility, performance, design centering and manufacturability of VCO's, Oscillators, Amplifiers, Phase Shifters, Switches, Filters and Baluns in various technologies. Broad process and product development experience in commercial and military industries.

RF Design Skills

Software Proficiencies – ADS (linear, non-linear, EM), Genesys, HFSS, Sonnet, TBasic. AWR, Cadence*, EMX*, System Vue*, and LTSpice* (*used in the past, not currently) PJK LABS designs are designed, completely simulated then verified by measurements.*

Professional Experience

PJK LABS LLC, AZ – Owner/Founder

2020 - Current

Sr Adv Commodity Engineer, RF Hybrids (General Dynamics, Mission Systems) prior 2020
Principal Engineer (Custom MMIC Inc)
Member Technical Staff (ViaSat)
Senior RF Engineer (Boeing Research and Technology)
Staff Engineer (Northrop Grumman)
RF Micro Devices, Greensboro, NC – Staff Engineer (Corp R&D)
Distinguished Engineer, Principal Engineer (Conexant)
Senior Engineer/Scientist (IBM)
Senior Member Technical Staff (Motorola)

(Detailed experience summary available on request to prospective clients)

Education

MSEE and BSEE in Electrical Engineering, Florida Atlantic University
Oscillator Noise Reduction through the use of Negative Feedback (Master's Thesis)

MEMBERSHIPS

Senior Member IEEE
Member IEEE Consultant Network

AWARDS

Motorola Distinguished Innovator (>10 patents)
Motorola Regional Patent of the Year

12 US Patents

US Patent 6,943,635 Optimum RF VCO structure
*US Patent 6,046,642 Amplifier with Active Bias Compensation**
*US Patent 5,781,072 Dual push-pull amplifier circuit and method**
*US Patent 5,572,435 Method for Designing a Transformer**
*US Patent 5,451,906 Circuit for Compensating an Amplifier**
*US Patent 5,420,562 Resistor Geometry for Enhancing RF Performance**
*US Patent 5,416,451 Circuit and Method for Compensating a Balun**
*US Patent 5,105,175 Resonant Circuit Element without microphonics**
*US Patent 5,051,710 Variable Zo Transmission Line Transformer**
*US Patent 4,785,264 Dual FET Oscillator**
*US Patent 4,785,263 FET Oscillator Circuit**
*US Patent 4,751,481 Molded Resonator**

***Patents based on new RF products introduced into production, unique - not derivatives.**