



**NRL BAA Announcement
#68-15-04**

ANALOG AND MIXED SIGNAL INTEGRATED CIRCUIT DESIGN AND CHARACTERIZATION

The Electromagnetics Technology Branch of the Naval Research Laboratory (NRL) is seeking proposals for innovative technology base development in the broad area of analog and mixed signal integrated circuit design and characterization. The circuits may operate in the 0.3-300 GHz range and specifically designed to process signals with either fixed or variable bandwidths, known or unknown modulation. The areas of interest include but are not limited to novel and innovative design and characterization of:

- 1) highly linear, broad band system on chip transceivers;
- 2) on-chip subsystems including but not limited to integrated antennas, integrated passive components, low noise amplifiers, mixers, filters, phase locked loops, voltage control oscillators, analog-to-digital and digital-to-analog converters, bias circuits;
- 3) power amplifier topologies that can address needs for high power, high linearity and high efficiency under defined or undefined signal drives;
- 4) low noise amplifier topologies and techniques that can substantially enhance the overall noise capabilities of a system within a wide range of operating temperatures;
- 5) multi-chip modules;
- 6) boards able to interface a novel or existing integrated circuit in the frequency range of interest to external circuits for further signal processing.

Address White Papers (WP) to baa681305@nrl.navy.mil. If confirmation of request is desired, please allow one month before submitting your request. Substantive contact should not take place prior to evaluation of a WP by NRL. If necessary, NRL will initiate contact.