



Electrical Engineer / Mixed-Signal Specialist

Job Description: Design high-performance mixed-signal systems combining sensitive analog signal acquisition, digital signal processing, switching power systems, and high power amplifiers to produce cutting-edge sonar imaging systems for both unmanned underwater vehicles (UUV) and underwater towed systems.

System Architecture

Choose suitable system modularization, communication protocols, and power distribution techniques to enable construction of a high-sensitivity signal acquisition system with excellent signal integrity and design flexibility.

Design complete systems capable of generating transmitting signals of 30kHz to 2MHz at hundreds of watts and receiving signals in the 30kHz to 2MHz range at levels at thermal noise levels - while isolating one from the other.

Circuit Design

Design wide-dynamic-range, low-noise, wide-band amplifiers in the 30kHz to 2MHz region with high in-band and out-of-band noise immunity.

Design linear and switching power amplifiers in the 30kHz to 2MHz region with burst output power of 10 to 1000 watts.

Design switching power supplies in the 10W-300W range having tightly-controlled electrical noise spectra.

Experience

5-10 years successful experience designing high-performance mixed-signal systems

Also helpful: RF engineering experience

Education

BSEE , MSEE a plus

Please forward resume to: Kleinemployment@MIND-Technology.com