



## eSonar Inc.

21 Mews Place, St. John's, NL, Canada

P: (709) 726-0338, F: (709) 726-0348

# Scope of Proficiencies

Founded in 2009, in St. John's, Newfoundland, eSonar Inc. specializes in hardware, software, firmware, and PCB design for embedded acoustic systems and custom engineering design services. We have experience in prototyping, new product development and adoption of modern embedded technologies, both in the hardware and software arenas. Our team of certified engineers are ready to assist your team with your ongoing projects, utilizing an extended development model to augment your capability, & build long-term supply-chain relationships.

## Core Competencies

### Underwater Acoustic Design

Product customization and full bespoke design of acoustic sensors, receivers, transducers, and other instrumentation; design of pressure capable systems for robust performance in the marine environment, including standalone and system level operation, and/or integration into existing systems/equipment.

### Subsea Variable Buoyancy Engines

Microprocessor controlled autonomous capability for buoyancy driven motion in the water column, can include hydrophones / acoustic telemetry with vertical profiling ability to record, store, process and transmit noise/data from the marine environment.

### Micro-power Subsea Sonar

Utilizing ultra-low power, state-of-the-art electronics extends battery life, for increasing sonar efficiency and longer deployment times while maintaining subsea sonar performance.

### Acoustic Data Telemetry

Expertise in signal processing and embedded software languages for reliable acoustic data encoding in underwater environments. When coupled with high-efficiency acoustic data transmitters results in high reliability, low power consumption.

### Design, Prototype Development, and Testing

Extensive experience concept, validation, and design services, including third-party systems integration. Our collective staff experience of more than 150 years of subsea design and product development experience is manifested in our extensive IP library, our custom firmware and signal processing software.

For additional information about eSonar's capabilities, contact our office **(709)-726-0338**, email us at [info@e-sonar.ca](mailto:info@e-sonar.ca), or visit our website at [www.e-sonar.ca](http://www.e-sonar.ca) to learn more.

## Company Information

**Legal Name:** E Sonar Inc.

**Canadian BN:** 824104624

**Year of Incorporation:** 2009

**Facilities:** 3500sq.ft. Office and Lab

## Some Recent Projects

**DND IDEaS:** AUV Detection System

**DFO:** Marine Mammal Detection System

**Ashored Innovations** – Rope on Command Fishing System design

**NRC:** Variable Buoyancy System Design

**Marine Industrial Lighting System** – Embedded PoE Smart Marine Lighting

**Notus Electronics**– Embedded subsea sonar with systems integration

**Smartcone** – Acoustic Theory Validation

**eSonar** – In-house acoustic products, including fishing trawl net monitoring systems, transducer design and manufacture, vessel mounted hydrophone manufacture.

We use SolidWorks, Altium Designer, Fusion 360, AutoCAD Eagle, MatLab, IDL and more

A specific IP-focused capabilities list is available for review on execution of an NDA.

## Engineering Team:

**Gary Dinn, P.Eng. Electrical (electronics), 30 years practice subsea & marine instrumentation)**

**Sandra Mercer, P.Eng. Electrical (signals & software), 20 years practice subsea controls & sig. proc.**

**Tracie Hughes, P.Eng. Mechanical (systems design), 15 years practice subsea oil & gas**

**Matthew Dinn, P.Eng. Computer (Embedded systems), 10 years practice subsea instrumentation**

**Primary Contact:** Gary J. Dinn, P.Eng., CTO and Corporate Director,  
E: [gdinn@e-sonar.ca](mailto:gdinn@e-sonar.ca) P: 709-769-1684 (m)