

Forward Research

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Forward Research provides a wide range of electronic technology research, product design, and consulting services.

About us

Forward Research has been providing hardware and software design services for over 15 years. Because of our broad experience in electronics, software, and project management, we are often able to do an entire project with one purchase order. We will also work with in-house or other outside engineering resources on portions of projects, as required.

No project is too small.

Verne Severson

Verne founded Forward Research as an electronic engineering consulting company in 1985. Previously, Verne was employed at Data 100, Astrocom, and Wordtronix. Verne has over 25 years of electronic hardware design and project management experience.

John Hardy, Jr.

John joined Forward Research in 1989. Previously John worked in both the manufacturing and engineering departments at Lee Data Corporation. John has been a key part of the business at Forward Research - designing controller hardware, writing controller firmware, and providing manufacturing documentation services.

Services

Forward Research can provide the following services during any or all stages of the development of electronic products:

► Early Product Definition

- Technology research
- Feasibility/cost studies
- Work with marketing personnel and product designers

► Product Design

- Project management services
- Electronic hardware design (digital and analog)
- Software/firmware development (C, assembly, etc.)
- Parts specification and sourcing
- Schematic capture, parts lists, and other documentation
- Arrange for cabinet rendering and design

► Prototype Build

- Circuit board layout
- Order parts including circuit boards
- Build prototype assemblies
- Write test software
- Performance testing of prototypes

► Pre-production

- Provide documentation and transfer files to customer drafting and technical writing departments
- Work with technical writers
- Compliance submissions to FCC, UL, CSA, DOC, etc.
- Develop solutions to EMI, ESD, and safety problems
- Define and/or write manufacturing/field support diagnostic software

► Manufacturing

- In house manufacturing of prototype quantities (through-hole and surface mount)
- Arrange for contract manufacturing
- Design and build test fixtures
- Product reliability studies, testing, and troubleshooting

► Existing Designs

- Troubleshooting
- Upgrade or improve existing products

Project Examples

- Small terminals with integrated modems
- International versions of integrated modems
- Design and manufacture of custom protocol converters
- Hardware design for very low cost local area network
- Motor controllers and data acquisition systems
- Design and manufacture of custom vending machine controller
- Credit card reader for vending machines
- Drivers license reader for age verification