Engineering Services

We have the expertise to match your needs.
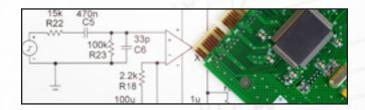
API ALLIANCE

"Partners In Production"

▶ Services

- Engineering Design From Concept to Production
- Control Systems
- Schematic Design
- Circuit Board Layout
- Re-engineering of Obsolete Schematic/Layouts/BOM
- Mechanical Engineering (CAD drawings and design)
- Automated Test Systems and Fixture Design

▶ PCB, Hardware, Enclosures and Integration

Sensors
- Environmental
- Pressure/Fluid Dynamics
- Power Management

Devices
- SoM - SoC

RFID
- HF, UHF, LF Frequencies
- Antenna Design & Tuning
- NFC

Integration of Modular Manufacturers and Chipsets

NXP   freescale   Multi Tech

LANTRONIX   MICROCHIP

▶ Controls - Interface - Wireless Device Integration

Control Systems - Interface Design Technology
- Intelligent Motor Controls
- Encoders
- Closed/Open Loop
- Control Algorithms/PID

Device Integration
- Graphical Display with Touch Screen
- 8-32 Bit Embedded Microcontroller MCU
- Character, Alpha Numeric and LCD Displays
- Removable Data Storage Drives
- Printer Systems

Interface Services
- Custom Security Encryption Algorithms
- LAN, WLAN & WAN Technologies
- Intelligent Battery Monitoring - Charging - Backup
- Real Time Clocks

Wireless Technology Integration
- Wi-Fi
- Bluetooth
- Cellular

▶ Software and Communication

Protocols
- Ethernet including PoE
- Modbus
- CAN bus
- 1-wire
- Standard Serial
- UART
- I²C
- USB

OS and Application Development Platforms
- Android/Apple
- Windows/Mobile
- Microsoft .NET and .NET Micro Framework

Programming
- Embedded
- Desktop PC Application
- Mobile Hardware
- Graphical User Interface

Programming Languages
- C, C++, C#
- Assembly
- Visual Basic