

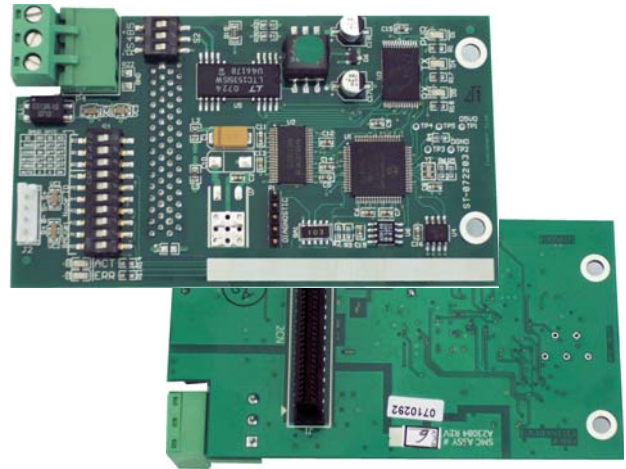
***ProtoConnect*** - a complete semi-custom module solution designed specifically for your application requirements

ProtoConnect is more than a product; it is a complete turn-key project involving design and source of a hardware/software solution for OEMs based upon the resources of FieldServer Technologies' ProtoCessor line.

FieldServer Technologies brings together the proven, extensive FieldServer driver library, coupled with the FieldServer experience in protocol translation gateways to provide the OEM customer confidence that their products will meet the foreign networks requirements for interoperability.

As a turnkey solution, ProtoConnect starts with a semi-custom form factor and then works closely with the OEM to re-spin this design to meet the manufacturer's platform requirements. ProtoConnect takes advantage of the robust FieldServer Protocol Engine (FPE) that is used in FieldServer standalone gateways and ProtoCessor protocol translation solutions worldwide.

ProtoConnect development involves everything within analog and digital design, schematics, and PCB design. Experienced FieldServer engineers with a proven record of solving manufacturer's protocol translation needs work closely with the OEM engineers to develop a solution that meets the manufacturer's needs while maintaining cost effectiveness, functionality, flexibility, modularity and manufacturability.



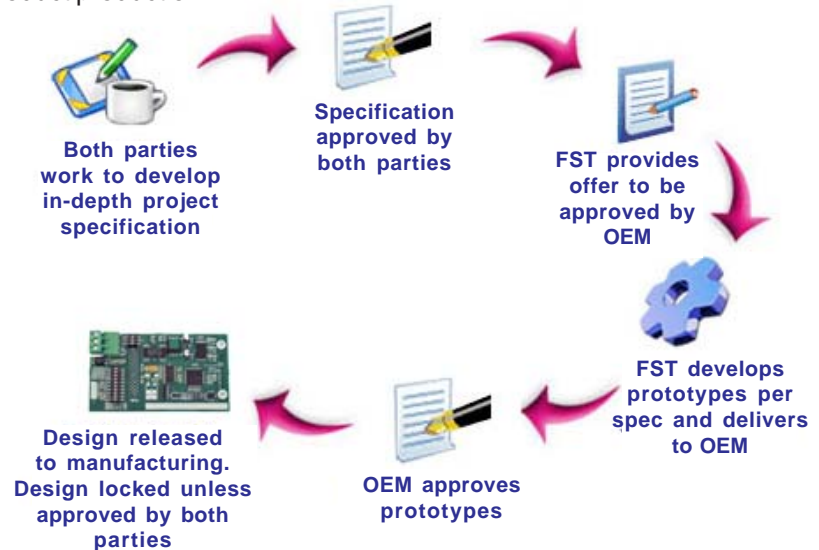
---

## Features and Benefits

- **Complete turnkey solution** from Designing/Testing/Branding to Manufacturing.
- ProtoConnect greatly **reduces the OEM's cost of development**.
- **Small fixed NRE** fee per development.
- **Shortest time to market**.
- **Lowest cost per unit** solution.
- FieldServer Technologies continuously **maintains the protocols** at no charge to the OEM.
- **Low investment** to generate incremental revenue in new markets.

## Project Design Cycle

- 1 FieldServer Technologies and OEM develop an in-depth project specification.
- 2 After approval of the specification by both parties, FieldServer provides an offer outlining both the one-time development fee and the cost of the final production module.
- 3 FieldServer develops the product based on the approved specification and timelines resulting in development of 10 prototypes. Five are used in FieldServer development and five are used by the OEM validation process.
- 4 Upon approval of the prototypes, FieldServer releases the product to manufacturing to setup necessary production and quality systems for product production.
- 5 FieldServer locks the hardware and firmware design and no further changes to the design occur unless agreed upon in writing by both FieldServer and the OEM. FieldServer will communicate to the customer of any suggestions that can improve the product.



## Specifications

### OEM's host compatible interfaces

- CAN 2.0B
- Dual-port memory
- Ethernet
- GPIO
- I2C
- LonWorks
- Parallel interface
- RS-232
- RS-485
- SPI
- TTL

### Field Supported Physical Interfaces

- ControlNet
- Ethernet
- LonWorks
- RS-232
- RS-485
- Various Fieldbuses

## Support Field Protocols

### Building Automation Protocols

- BACnet MS/TP (BTL tested code)
- BACnet/IP
- LonWorks
- Metasys N2 by JCI

### Industrial Automation Protocols

- Allen Bradley DF1
- Allen Bradley EtherNet/IP
- ControlNet
- DNP3
- Modbus ASCII
- Modbus RTU
- Modbus/TCP
- Profibus DP
- SNMP
- Various others

