

Upstate Networks Incorporated

Capabilities Summary

Company

Upstate Networks was founded in 1994 and Incorporated in New York in 1995. The company is a computer engineering design and manufacturing concern capable of producing 1,000+ assembled circuit boards monthly and has an in-house electrical engineer. Also has in-house embedded micro controller design and programming skills. The company has annual sales under \$250,000.00 and employs between two (2) and six (6) engineers, technicians, and/or assemblers depending upon workload.

Products

Upstate Networks manufactures the BA2PC™, and the MDB2PC™. The BA2PC™ is a bill acceptor to RS-232 hardware interface using digital signal processing on a microchip PIC housed, potted, and connectorized. The MDB2PC™ is a multi-drop bus to RS-232 protocol conversion circuit using a microchip PIC and 2kLOC of assembly language programming instructions to control up to 16 unique vending devices simultaneously through a standard interrupt driven RS-232 communications event.

Patents

Upstate Networks holds US Patent 5,822,215 for Public Access Internet using Pliant Currency acceptors. The company has applied for US Patent protection for the Multi-drop Bus to RS-232 Interface, application number 10/060,813.

Capabilities

Layout and design of Printed Circuit Boards (PCBs)

- Circuit maker and Traxmaker PCB emulation and design software
- Prototyping of small quantity builds with in-house etching
- Generate Gerber files and component lists
- Provide spec to board house and/or PCB layout in electronic format

PCB Assembly

- Up to 10 stations for production of 1,000+ pieces per month
- Virtually unlimited manufacturing space for larger orders
- Certified soldering skills
- Testing, packing and shipping

Digital circuit design

- Assembly language programming
- Microchip embedded micro controllers (PIC)
- A/D, D/A controllers
- RS-232 Interfaces

Equipment:

- HP 1630G Logic Analyzer
- Tektronix 2230 100MHz Digital Storage Oscilloscope
- HP 3310A Function Generator
- Microchip Picstart Plus EPROM Burner
- Fully Stocked lab bench

Facility

- 10 assembly stations
- Loading dock and freight elevator
- 3,500 sqf. Manufacturing expandable indefinitely

Computer Resources

- Complete bench stock of computer hardware
- NT 4.0 and Redhat 7.0 Linux WWW servers
- Vintage computer collection
- T1 Internet Access

Programming Resources

- Assembly language, Visual Basic, C, HTML
- RS-232 Protocol Experts
- Multi-drop Bus (Vending Industry standard)

Key Personnel

Mr. Christopher Smolen:

- B.S. Electrical Engineering University of Buffalo, New York 1989
- M.S. Computer Science SUNY Utica/Rome, New York 1994
- Ph.D. Computer Science (In progress) Syracuse University, New York

Mr. Smolen has brought four (4) products to market through his work at Upstate Networks Incorporated including the BA2PC™, the MDB2PC™, the CashCube™, and the Cctime™ software suite. Mr. Smolen has 12 years engineering design and 6 years manufacturing experience. His experience is in the field of digital circuit design, primarily embedded micro controllers. Mr. Smolen has experience with Assembly, C, Visual Basic, Java, and HTML. He also has experience with LAN design and Server Configuration including NT and Linux.

Mr. Dan Johnston:

- AAS Electrical Engineering Technology MVCC, New York 1991

Mr. Johnston has designed and developed firmware protocol routines for vending machine controller interfaces including the MDB2PC™. Mr. Johnston also has experience in electronics assembly and purchasing.

Company Location and Facilities

Upstate Networks corporate office, and manufacturing facilities are located at 1001 Broad Street, Second Floor, Utica, New York 13501. Phone (315) 732-5664, fax (315) 732-5687, www.upstatenetworks.com e-mail info@upstatenetworks.com