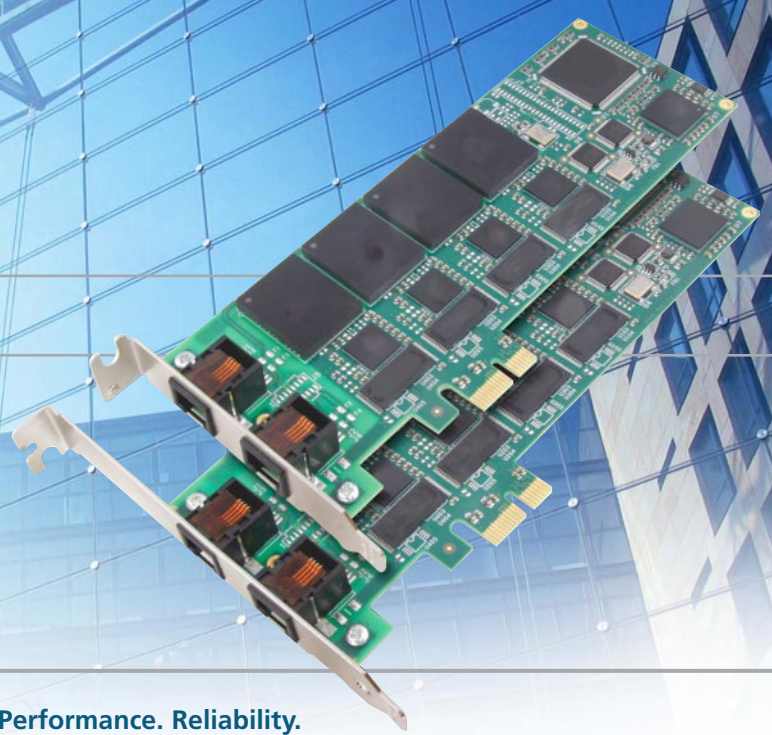


## **IQ Express™**

### *Intelligent PCI-Express Fax Board*

The newest addition to the intelligent fax board lineup, the IQ Express™ provides customers with the speed, reliability and performance of enterprise-class fax hardware at an exceptional price-to-performance guarantee.

In an ultra-small form factor design, this PCI-Express board is ideal for space constrained environments.



### *Feature Highlights*

- **Widest Range of Applications Supported**  
Supports Class 1.0, 2.0 and 2.1 for compatibility with the broadest range of applications
- **Turbo Speed**  
Super G3 V.34/33.6K fax communication
- **Built-in Intellichannel Processor**  
Dedicated 56 MIPS CPU and 120 MIPS DSP per port
- **Best-In-Class Hardware Design**  
PCI-Express 2.5Gbps Single Lane (x1) Link and automatic port reset
- **Full Scalability**  
Unlimited number of boards can be operated concurrently
- **Native Operating System Support**  
Microsoft Windows and Linux
- **Ultra Quick and Simple Installation**  
Fully Plug and Play compatible, no manual configuration required
- **Environmentally Friendly Product**  
Exceeds Requirements of European, Japanese, and US State Environmental Legislation
- **Peace Of Mind**  
30 Day Satisfaction Guarantee, 5 Year Hardware Warranty, Optional Express Replacement Service

### **Speed. Performance. Reliability. Unmatched in the Intelligent Fax Hardware Industry.**

The turbo speed of the IQ Express™ intelligent board can be attributed to Intellichannel technology. This fully scalable architecture provides each port with its own dedicated Controller (CPU) and Digital Signal Processor (DSP).

While other intelligent fax board manufacturers have multiple ports sharing CPU and DSP resources, IQ Express™ cards have a dedicated 56 MIPS CPU and a separate 120 MIPS DSP for each port. This innovative design architecture provides superior levels of speed, performance and reliability.

### **Widest Range of Applications Supported**

The IQ Express™ supports Class 1.0, 2.0 and 2.1 fax protocols, allowing the card to support the broadest range of applications available.

### **Innovative Design for Space Constrained Environments**

The innovative, short-board form factor design ensures that high-performance boards are available for the widest possible range of systems. An optional low profile bracket allows the IQ Express™ to be installed in 1U rack mountable computers.

Delivering more board features in less space the IQ Express™ is 6.60 inches in length and requires 50% less real estate than traditional fax hardware options.



Cantata TR1034™ (12.37" x 4.22")



Cantata TruFax® (7.45" x 4.21")



IQ Express™ (6.60" x 2.53")

Web: [www.mainpine.com](http://www.mainpine.com)



### **Mainpine, Inc.**

9450 SW Commerce Circle, Suite 401  
Wilsonville, Oregon 97070 USA

Tel. +1 503.822.9944

Fax. +1 503.822.9943

Email. [info@mainpine.com](mailto:info@mainpine.com)

## IQ Express™

### Intelligent PCI-Express Fax Board

#### Application Certified

Leading fax applications have been rigorously tested by Mainpine's Certification Laboratory to ensure the highest levels of interoperability.

#### Bracket Options

The IQ Express™ is available in a low-profile bracket as well as a standard-profile bracket option for maximum flexibility.

#### Scalable

Select the number of intelligent IQ Express™ cards to meet today's messaging needs. As demand grows, simply add more boards to your system to lower your total cost of ownership. Any number or combination of IQ Express™ boards may be operated concurrently.

#### Based on V.34 Fax Standard

The IQ Express™ supports high speed V.34 Super Group 3, providing facsimile send and receive speeds up to 33600 bps.

V.34 fax sends and receives faxes at more than double the speed of the V.17/14400bps standard. When V.34 is combined with advanced document compression a typical 60-second high resolution fax (V.17) can be sent in less than 12 seconds.

#### Advanced Compression with JBIG

Class 1.0, and 2.1 allows faxing at speeds to V.34/33.6kps and can support JBIG data compression. JBIG offers data compression anywhere from 20 to 80 percent - allowing the fastest throughput rates in the industry. For fax users, it means that both incoming and outgoing faxes are sent and received quickly, translating to significant savings in long distances telephone charges.

**V.17 without JBIG: 389 seconds**



**V.34 without JBIG: 188 seconds**



**V.34 with JBIG: 110 seconds**



- Test data acquired in Mainpine ISV certification laboratory, April 2007.

- Tests measured transmission times of a 13-page ITU-T facsimile test document sent at V.17, V.34, and V.34 with JBIG compression.

#### Sideband API

A unique feature called the Sideband API gives each IQ Express™ port the ability to be reset by the fax application without interrupting other ports and without requiring any manual intervention. This innovative feature ensures maximum efficiencies and up-time and gives the IQ Express™ product line an advantage over other intelligent fax devices.

#### Security

Unlike budget modems, and some high end boards the IQ Express™ is completely dedicated to fax communications, eliminating security vulnerabilities posed by alternative devices.

## Technical Specification

#### Fax

- ITU-T V.34 (Super G3), V.17, V.29, V.27 ter, V.21 ch. 2, and V.8 Call Establishment
- ITU-T T.30, T.31, T.32 (Service Class 1.0/2.0/2.1)
- ECM Error Correction Mode
- MH, MR, MMR, JBIG and JPEG Compression
- Normal, Fine, Superfine, Hyperfine, Ultrafine, and Additional Resolutions up to 1200dpi

#### Caller ID

- Type-1 (on-hook) / Type-2 (off-hook)
- US, UK, ETSI, and DTMF

#### Hardware

- 56 MIPS CPU per port
- 120 MIPS DSP per port
- Global DAA
- Software controlled hardware reset per port
- Software readable 48bit serial number
- Single interrupt per board
- Power consumption: Less than 1 Watt
- Mix-and-match RockForce™, IQ Express™ and Third-party hardware

#### Physical Interface

- POTS: 1 port / 1 x RJ11; 2 port / 2 x RJ11; 4 port / 2 x RJ14; 8 port / 2 x RJ61
- PCI-Express: x1 Link, dual-simplex, 2.5Gbps

#### Physical Description

- 6.60 x 3.12 inches (Low Profile Bracket)
- 6.60 x 4.72 inches (Standard Profile Bracket)

#### Environmental

- Operating temperature: 32F - 122F
- Storage temperature: -4F - 185F
- Relative humidity: 10% - 80%
- Non-condensing Altitude: 0 - 12,000 Feet

#### Operating Systems

- Windows XP
- Windows 2003
- Windows Server 2007 (Longhorn)
- Windows Vista
- Linux

#### Standards & Approvals

- Manufacturing: BS EN ISO 9001:2000
- Telecom: TIA 968-A (FCC Part 68), IC CS03, TS 103 021 (TBR21), 60+ countries pending
- EMC: FCC Part 15, ICES-003, EN 55022, EN 55024
- Safety: UL 60950, CSA 60950, EN 60950
- Environmental: EU 2002/95/EC ("RoHS"), EU 2002/96/EC ("WEEE"), EN 50419
- CE Mark
- PCI Express Base 1.0a

#### Service and Warranty

- 30-Day satisfaction guarantee
- 5-Year hardware warranty
- Express Replacement hardware option

#### IQ Express™ - Order Information

- RF2117 (1 port; Low-Profile)
- RF2118 (1 port; Standard-Profile)
- RF2119 (2 port; Low-Profile)
- RF2120 (2 port; Standard-Profile)
- RF2121 (4 port; Low-Profile)
- RF2122 (4 port; Standard-Profile)
- RF2123 (8 port; Low-Profile)
- RF2124 (8 port; Standard-Profile)

### Authorized Dealer



#### BisPro Services

11 Colonel Butler Drive  
Markham, On. L3P 6B5  
Tel: 905-910-0313  
Fax: 905-471-0337  
Cell: 416-315-0038  
Email: brobb@bispro.ca  
Web: www.bispro.ca



### About Mainpine

Mainpine products have earned a reputation for speed, performance and reliability. As the world's smallest intelligent fax board, the IQ Express™ is a testament to the company's focus on developing platforms which outperforms all other intelligent fax hardware solutions on the market today.