MAINPINE
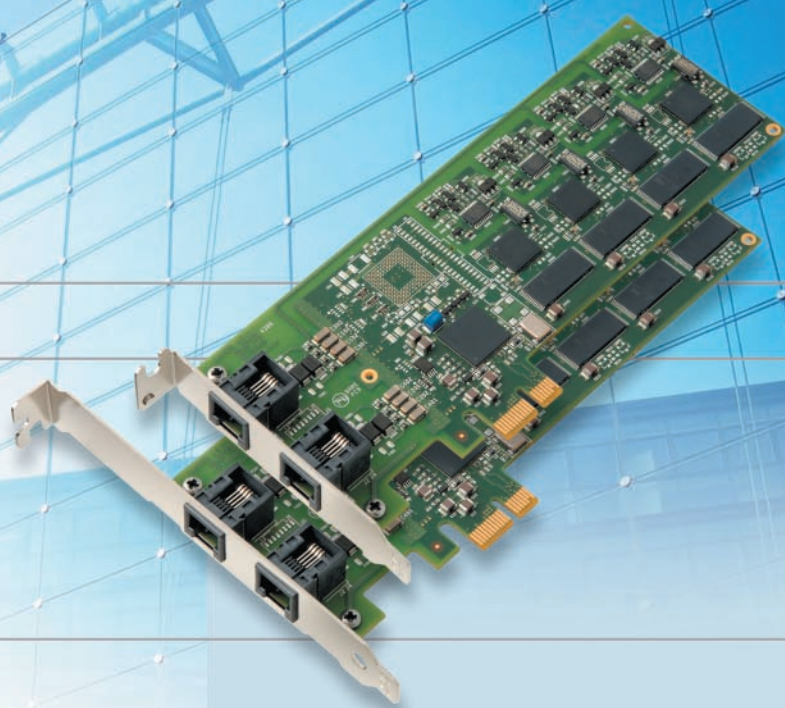
IQ Express™

Intelligent PCI-Express Fax Board

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

In an ultra-small low profile design, these 1, 2, 4 and 8-port PCI-Express analog fax boards are ideal for space constrained environments.

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

The IQ Express™ supports the most advanced fax standards in the industry. The V.34 fax standard allows the board to fax at speeds up to 33600 bps. In actual use this commonly doubles fax throughput per port over V.17 (14400 bps). Error Correction Mode (ECM) allows the board to intelligently cope with many types of occasional line problems and interference to deliver perfect image quality.

These features are delivered by the advanced on-board processing power of the IQ Express. While other intelligent fax boards share a Controller (CPU) and Digital Signal Processor (DSP) between multiple ports, each port of the IQ Express has a dedicated 56 MIPS CPU and 120 MIPS DSP. This innovative design provides superior levels of speed, performance and reliability.

Innovative Design for Space Constrained Environments

The IQ Express is the only low-profile short-format intelligent fax board in the industry. The IQ Express fax board ships with a standard-profile bracket attached; a low profile bracket is included in the package at no extra cost. This allows the IQ Express to be installed in today's new 1U racks and slimline desktop systems.

Delivering more board features in less space, the IQ Express is only 6.6 inches in length and requires 50% less space than other intelligent fax board options.

Cantata (Brooktrout) TR1034™ (12.37" x 4.22")

IQ Express™ (6.60" x 2.53")

Feature Highlights

- **Super High-Speed Fax**
  Supports up to V.34 (33600 BPS) fax speed

- **Error Correction Mode (ECM)**
  Helps faxes negotiate through many kinds of problematic line conditions and interference

- **Dedicated Processing Power Per Port**
  Dedicated 56 MIPS CPU & 120 MIPS DSP per port

- **Widest Range of Applications Supported**
  Supports Fax Class 1, 1.0, 2.0, 2.1 and Microsoft Fax API for compatibility with a wide range of applications

- **Supports All PCI-Express Expansion Slots**
  PCI-Express 2.5Gbps Single Lane (x1) Link supports all x1, x4, x8 and x16 PCI-Express slots

- **Full Scalability**
  Unlimited number of 1, 2, 4 or 8 port boards can be placed in a single server

- **Microsoft™ Fax Compatible**
  Mainpine Fax Engine™ software adds high-speed fax and ECM to Microsoft Fax

- **Enhanced Network Security**
  Data communication is blocked and only fax communication is allowed through the board

- **Environmentally Friendly Product**
  RoHS/WEEE certified device that exceeds worldwide environmental standards

- **Peace Of Mind**
  30-day satisfaction guarantee, 5-year hardware warranty and optional tech support plans are available

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Web: www.mainpine.com

RoHS 2002/95/EC compliant

PCI-EXPRESS

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MAINPINE

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Widest Range of Applications Supported

The IQ Express supports the Fax Class 1, 1.0, 2.0, 2.1 and Microsoft Fax API standards, allowing the board to support the widest range of applications. Since these are fully documented standards, application vendors are not required to support proprietary API's as they would with similar intelligent fax boards.

Full PCI-Express Compatibility

IQ Express intelligent fax boards include a PCI-Express 2.5Gbps Single Lane (x1) Link that supports all x1, x4, x8 and x16 PCI-Express slots. This x1 link, along with the short height and length of the board, means that the 1, 2, 4 and 8-port versions of the IQ Express can all fit into any PCI-Express slot.

Scalable

Select the number of intelligent IQ Express fax boards to meet today's messaging needs. As demand grows, simply add more boards to your system to support additional analog phone lines. Any number or combination of IQ Express boards may be operated concurrently.

Microsoft™ Fax Compatible

Most versions of Microsoft Windows™ are pre-installed with free fax server software. Purchasing the IQ Express gives you the Mainpine Fax Engine which supercharges your Microsoft Fax server and supports many advanced features. This includes high-speed fax, ECM and detailed transaction logging. Microsoft Fax supports any application that has the ability to print. This includes the complete Microsoft Office suite.

Security

All budget modems and some high-end fax boards support data communication as well as fax. This hole in the data communication network can pose a risk to a company's network security. The IQ Express intelligent fax board is dedicated solely to fax communication, and all data communication is blocked. This enhanced security feature eliminates the vulnerabilities posed by alternative devices.

Environmentally Friendly

The IQ Express is built and packaged with environmentally friendly components and materials. The IQ Express is a RoHS/WEEE certified device that exceeds all worldwide environmental standards.

Mainpine IQ Express 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 1/1.0/2.0/2.1)
- 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 readable 64bit 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, 32bit and 64bit
- Windows Vista, 32bit and 64bit
- Windows Server 2003, 32bit and 64bit
- Windows Server 2008, 32bit and 64bit
- Linux, 32bit and 64bit

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 1.1

Service and Warranty
- 30-Day satisfaction guarantee
- 5-Year hardware warranty
- Support Contracts available

IQ Express™ - Order Information
- **IQ Express 1-Port, RF5118** (Supplied with Standard and Low Profile Brackets)
- **IQ Express 2-Port, RF5120** (Supplied with Standard and Low Profile Brackets)
- **IQ Express 4-Port, RF5122** (Supplied with Standard and Low Profile Brackets)
- **IQ Express 8-Port, RF5124** (Supplied with Standard and Low Profile Brackets)

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 that outperform all other intelligent fax hardware solutions on the market today.