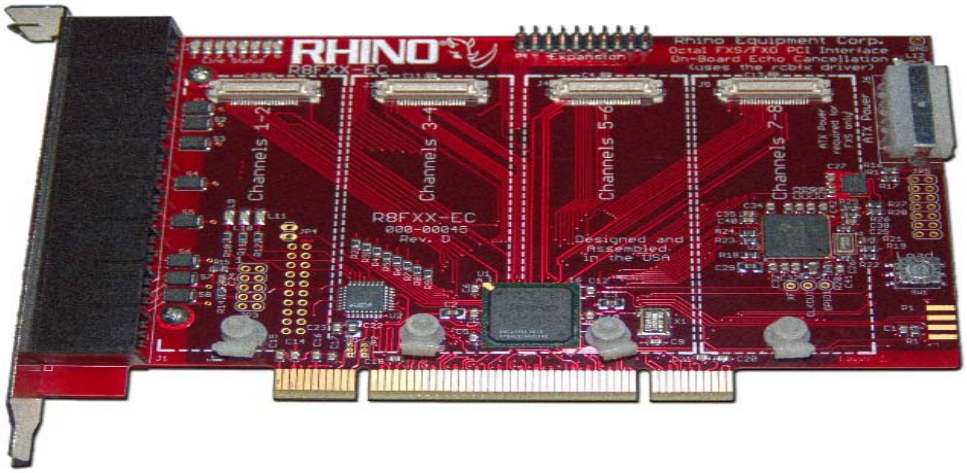
RHINO EQUIPMENT CORP.

Linux Open Source Telephony
8 Port FXS/FXO with Echo Cancellation
R8FXX-EC PCI Plug-In Card

Providing reliable, flexible, and leading-edge solutions for a demanding telecommunications industry, including the Asterisk* community.



Managing your open source telecommunication needs has never been easier than with Rhino products. Rhino PCI plug-in cards satisfy the needs of Open Source Telephony (OST) applications, no matter how stringent the requirement. Rhino Open Source Telephony PCI cards feature Asterisk, Zapata and Linux tested software. Knowing that Rhino products are ready to perform right out of the box means that you can spend more time developing important customer relationships.

The Rhino R8FXX-EC is “ready to roll” with two incredible feature differentiations over our competition - our on-board control element, and our on-board Echo Cancellation circuit. The control element eliminates PCI bus “bit banging”, which means that the R8FXX-EC requires less CPU power, and more Rhino cards can be used in one computer over alternative, antiquated solutions. The Echo Cancellation circuit provides echo protection no matter what, to ensure that calls are clear, crisp and echo free.

Rhino Equipment Corp. offers you a complete line of low cost PCI plug-in cards including Single T1/E1, Dual T1/E1, Quad T1/E1, Quad FXO analog, Octal FXS/FXO and 24-port analog fixed and mixed mode analog interfaces. And don’t forget the full line of Rhino Channel Bank products, for large scale analog FXS or FXO applications.

Using Asterisk? Rhino Open Source Analog Telephony PCI products allow you to utilize analog phones and wiring in conjunction with leading-edge Asterisk technology -- without having to buy expensive IP telephones. Why go IP when you can save on installations by using your proven existing wiring? Rhino allows you to use lower cost analog phones with digital features, get guaranteed T1 voice quality, all with less to worry about while enjoying other Asterisk features.

Rhino products are tough. In the rare case of trouble, our technical support staff is ready to provide the support you need, when you need it. Our 5-year, limited warranty means that you can be confident that Rhino will always work hard in your Open Source Telephony application.

* Asterisk is a registered trademark of Digium

Rhino Equipment Corp.
Octal FXX PCI Plug-In Card Specifications

PCI Card Features

- Asterisk soft PBX tested and ready
- Zaptel-compliant open source Linux module source code
- On-board Texas Instruments and Adaptive Digital Technologies Echo Cancellation technology
- Proven Infineon PEB3268 DualSLIC chip
- Proven Silicon Labs FXO DAA component - Si3050
- Silicon Labs international line interface device - Si3019
- Custom Rhino PCI interface chip means no excess CPU overhead
- Rhino on-board control element eliminates PCI bus bit banging. The R8FXS-EC loads the PCI bus to no more than the load of a T1 card.
- Eight independant female RJ11 connectors at card bracket
- Field software upgradable
- All major signaling modes supported
- Advanced features such as Caller ID and Distinctive Ring
- 5-year limited warranty

Benefits

Rhino Equipment Corp. provides a flexible and reliable product line to satisfy all T1, E1 and analog needs. Our products will beat your expectations, or your money back - guaranteed.

Our limited 5-year warranty means that you do not have to worry about your investment while it is in use - we do that for you.

DAA Features

- On-chip uLaw or aLaw CODEC with integrated PCM highway
- 80db dynamic range Tx/Rx
- 3 uA on-hook line monitor
- Programmable digital gains
- Line voltage and loop current monitor
- Integrated ring detector
- Programmable line interface, including AC termination, DC termination, ring detect threshold, ringer impedance to support over 70 countries
- Tip.Ring polarity reversal detection

SLIC Features

- On-chip uLaw or aLaw CODEC
- Integrated ringing generator, 65 Vrms capable
- +12V power derived from ATX power connector
- -48V DC on hook voltage, 25mA maximum loop current, loop start feed
- USA AC and DC impedance characteristics
- 500msec end-of-call battery interruption, programmable to 3 seconds
- MWI neon bulb capable
- On-hook data transmission

Echo Cancellation Specs

- On-board - no module
- Adaptive Digital Technologies G.168 Echo Canceller is a carrier-class, ITU G.168 compliant line echo canceller, which meets and exceeds G.168-2002
- Cancels up to 128msec tail
- Non-linear processor
- Comfort Noise Generator
- Automatic tail search
- Excellent voice quality
- Cancels multiple independent tails
- Fast Convergence
- No divergence due to doubletalk
- Tone Disabler disables echo canceller during voiceband modem and FAX connections

Mechanical Data

Size: 4.0” tall, 6.25” wide
Form Factor: Single PCI slot
Shipping Weight: 1 pound with all included components maximum

Why Rhino?

Stop paying high prices when all that you want is a product that works, from a company that believes that your success is our success.

All Rhino products are designed and manufactured in the USA by Rhino engineering and manufacturing staff. Using Rhino products guarantees that you are getting the lowest price while receiving the highest performance.

Rhino Equipment Corp.is a leading supplier of highly flexible and reliable product s that satisfy all T1, E1 and analog needs for Open Source Telephony projects.

Our products will beat your expectations, or your money back - guaranteed. Our limited 5-year warranty means that you do not have to worry about your investment while it is in use - we do that for you.

Our technical support staff will not go home at 5PM and tell you to call back tomorrow!

Call us!
(800) 785-7073 Option 1

Email us!
sales@rhinoequipment.com

Technical questions?
support@rhinoequipment.com

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www.rhinoequipment.com

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Rhino Equipment Corp. is proud to manufacture our products in the U.S.A..

Specifications are subject to change without notice.