Rhino 1PFAIL Single Port Failover Card - Analog or Digital

Product Name: Rhino 1PFAIL Single Port Failover Card - Analog or Digital
Manufacturer: -
Model Number: 1PFAIL

Please note: The Rhino 1PFAIL Single Port Failover Card has been discontinued. Please see the Sangoma Asterisk Cards for an alternative product.
Providing reliable, flexible, and leading-edge solutions for a demanding industry. Managing your open source telecommunication needs has never been easier than with Rhino products. The Rhino single port failover card provides a reliable method of positively managing analog or digital telephony sources (port 1) with one of two possible destinations; the normal operating destination (port 3), or the failover or redundant destination (port 4). In addition, a 2-pin header can connect directly to the PC motherboard and act as a failover reset source to restart the down PC. The Rhino single port analog and digital failover is a self-contained, actively controlled, redundant switch with one input and two outputs (A-B). The failover card utilizes a powerful microcontroller that selects one of the two outputs depending on the condition of the main Asterisk server. The failover uses a loadable Asterisk module (.so) which communicates with the microcontroller by regularly sending an “OK” (watchdog) signal when Asterisk is running. When that “OK” is not received, normally when Asterisk fails, the microcontroller automatically switches ports to the failover device after a user defined duration. If the PC reset feature is enabled (it must be user enabled to operate in this mode), the PC will be reset. In addition, when power fails (USB power) the card automatically switches to the failover port. In analog mode, the Rhino single port failover allows for the connection of one, two or three telco FXO lines (6 wires in an RJ11, or four lines in a RJ45 if specially terminated) between Rhino FXO ports and single line telephones. In the case of failure, the Rhino single port failover will connect FXO lines to the single line telephones, allowing for both incoming and outgoing calls to be handled on the single line telephones until the server can be brought back on-line. In digital mode, either an Ethernet or a T1/E1/J1 line can be switched, since all eight wires are routed straight through on the failover card to either the A or B port. In addition, in T1/E1/J1 mode, port 2 of the failover card is designed to be used with digital monitoring systems, with wires 1-2 and 4-5 connected from port 1 to port 2 through four 470 ohm resistors. Rhino designed products are tough. In case of trouble, our technical support staff is ready to give you the support you need. Our 5-year, limited warranty means that you can be confident that Rhino will always work hard in your Open Source Telephony application. 1-Port Failover Standard Features

ï¿½ Asterisk soft PBX tested
ï¿½ Two parallel USB connectors: one internal to motherboard, or external using type B USB female connector
ï¿½ Two-pin male header and cable to connect the failover card to the PC reset header pins on the motherboard
ï¿½ One input (port 1) - RJ11, RJ45 or RJ48 (all 8 wires passed to all ports) switched to either the A (normal, port 3) or B (failover, port 4) position
ï¿½ One T1/E1 digital passive monitor port (port 2) that connects pins 1-2 and 3-4 from the input port (port 1), to port 2 through four series 470 ohm resistors
ï¿½ For FXO-FXS channels, one, two, three (or four using a RJ45) lines can be switched using all 6 wires in a RJ11
ï¿½ Software programmable watchdog timer allows for setting the max time between watchdog pings from the server
ï¿½ Fits into a single PCI slot at the chassis, no PCI electrical bus connection needed

Hardware and Software Description Hardware

ï¿½ Single 4-port RJ11, RJ45 or RJ48 female connector
ï¿½ Powerful microcontroller controlled
ï¿½ User selectable switch that overrides the microcontroller and operates as a USB power

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monitor only
ï¿½ Sits in a single PCI card slot
ï¿½ Uses one USB port
ï¿½ Two status LEDs per port, red and green
ï¿½ Consumes less than 1/2W of power from the USB port
ï¿½ Includes a 4-wire cable to connect to motherboard USB header
ï¿½ Includes a 2-wire reset female-to-female cable to connect to the PC reset header
ï¿½ 3.50” tall, 2.00” wide, PCI bracket included
ï¿½ Operating Temperature: 32–122°F (0–50°C); Humidity: 5–90%, non-condensing
ï¿½ 5-year limited warranty

Software We have also decided to include all protocols and software in source format. Included are:

ï¿½ Asterisk soft PBX plugin for out-of-the-box integration
ï¿½ Windows example application GUI written in Visual C# language, easy to use and follow
ï¿½ Linux C library and example applications written in C, PHP, and Python
ï¿½ Complete communications protocol for easy and flexible implementation into any new or existing system using standard USB-over-serial command messages.

Standard Features

ï¿½ Failover works with any PC
ï¿½ Asterisk soft PBX tested and ready
ï¿½ Comes with a Windows-based test program
ï¿½ ASCII command communication method
ï¿½ Ready to go right out of the box
ï¿½ Comes with an internal cable to connect to a 10-pin USB motherboard header, plus a 2-pin reset cable
ï¿½ 5-year limited warranty
ï¿½ Unlimited Support

Size and Form Factor: 3U (3.50") tall PCI bracket Weight : 1 pound for base configuration Includes : 14" cable to connect 4-pin header on 1-Port Failover to a 10-pin USB motherboard connection, 14" 2-pin female-to-female cable for connection to the PC reset header pins Downloads: Sofware source code for Asterisk module (.so) use, user API library, Windows C# GUI source code

Please Enquire