



Electronics

Modem Multiplexer

System to pool 8 to 128 internal modems from one linux server

5th April 1997

Product datasheet – first page only

- **Up to 128 modems per PC**
- **Low capital outlay**
- **More reliable than external modems**
- **Use inexpensive internal modems**
- **High throughput**
- **Organises your modems for you**
- **Can reset (local or remote) any modem**
- **Fits into standard PC cases**

Description

The Modem Multiplexer is a more rational approach to connecting a number of modems to a PC. Unlike multiport cards, the Modem Multiplexer is designed specifically to use internal modems and other UART-based PC expansion cards.

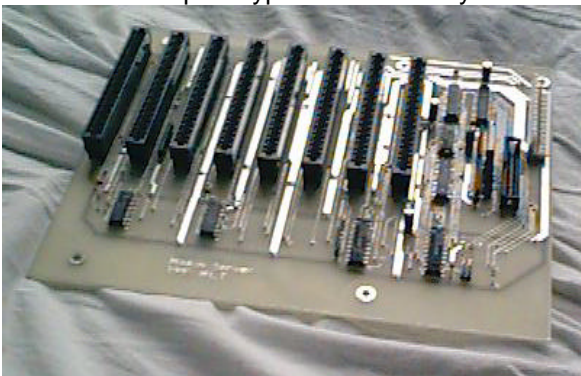
Internal modems have significant price, reliability, size, and cabling advantages over external modems.

The Modem Multiplexer overcomes the "max 4 per PC" limitation, by allowing up to 128 internal modems to be installed in 16 standard PC cases, all connected to one PC via a daisy chain bus. The use of standard PC cases to house the modems provides a very cost-effective power supply, cooling system and protected environment. The clutter of plugboxes, serial cables and modems is eliminated. The result for systems in use has been improved system stability over the discrete approach.

The Modem Multiplexer electronics provides extremely cost-effective multi-port serial expansion by taking advantage of the modems' on-board 16550A UARTs. High throughput is maintained, and it allows the use of proven serial interface code. Any modem can be hardware reset under software control (local or remote) - an additional advantage over external modems which typically need their power removed.

This adds up to a product with the combination of stability, throughput, cost and dependability that your ISP application demands. It is also a cheap alternative to expensive developing 56k technology.

Pictures are of prototype hardware only



backplane (up to 4 per...)



controller (to 4 per PC)

System includes:

- Backplane for installation of modems in (above left)
- 8 bit controller card for installation in server PC (above right)
- Backplane-to-case ribbon cable + Cable from controller card to modem box (1.5m long)
- User manual, quick installation guide, driver disk
- (You will need to supply the modems and a standard PC case with power supply)