

# Sangoma A400 FXO FXS Analogue Card PCI (A400BRM)



Product Name: Sangoma A400 FXO FXS Analogue Card PCI (A400BRM) Manufacturer: -Model Number: A400BRM

Please Note: This product has been discontinued. Please see the Digium Asterisk Cards range for an alternative.

Sangoma A400 FXO FXS Analogue Card PCI (A400BRM)

Please Note: This is a PCI Card. Please make sure your motherboard/server is compatible with this product.

View PCI vs PCI-Express example

The A400 Series is the high density version of the popular A200 series analog cards. Identical in operation and configuration, and using the same FXO and FXS modules, the A400 system supports twelve ports per main board and REMORA, as compared to four ports for the A200.Sangoma A400 Key Features

� From 2 to 24 ports supported, mixing FXO and FXS interfaces as required.
 � Support for the Asterisk, Yate, FreeSwitch, OPAL, PBX/IVR projects, as well as other Open Source and proprietary PBX/Switch/IVR/VoIP gateway applications.
 � Single synchronous PCI interface up to 48 FXO/FXS ports.

If you need to, one additional REMORA card can be added to the base twelve port A400 card. A single PCI or PCI Express slot host connection can support up to 24 FXO/FXS ports with common synchronous clocking for all channels.

Supporting the same total capacity of the A200, the A400 is designed for those specific requirements, where the space might not be available in the PBX case to have upto 5 additional Remora's like the A200, but the same large capacity is still required.

Like all the Sangoma AFT Series, the A400 and REMORA system has field upgradeable firmware to take advantage of enhancements as they become available. Optionally, the A400 supports Sangoma's echo cancellation and voice enhancement DSP daughterboard for carrier grade echo cancellation and voice enhancement.

Architecture

The A400 consists of an A400 REMORA daughterboard mounted on the AFT PCI /PCI Express. The A400 REMORA card has six sockets each which can accept an FXO-2 or FXS-2 module. Each FXO-2 or FXS-2 module supports two FXO or FXS lines respectively.

Up to one additional A400 REMORA daughterboard can be mounted in empty slot positions beside the A400 assembly, connected to the A400 by a backplane bus connector. Each 12 port A400 REMORA card is connected by means of a standard 12 line color coded telephone cable terminating at the card in a robust DB25 connector, and ready for hard wiring into a punch block at for the PSTN connection.

Sangoma A400 - Technical Specifications General Features

ï¿1/2 From 2 to 24 ports supported, mixing FXO and FXS interfaces as required.

ï¿<sup>1</sup>/<sub>2</sub> Support for the Asterisk, Yate, FreeSwitch, OPAL, PBX/IVR projects, as well as other Open Source and proprietary PBX/Switch/IVR/VoIP gateway applications.

ïزن Single synchronous PCI interface up to 48 FXO/FXS ports.

 $i_{\dot{c}}$  Connection by means of a standard 2 line colour coded telephone cable for connection to a punch block.

ï¿1/2 Dimensions: 2U height form factor: 290mm x 55mm for use in a 2U chassis.



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 $i_{\dot{c}}$ <sup>1/2</sup> Short 2U compatible mounting clips available for installation in 2U rackmount servers.  $i_{\dot{c}}$ <sup>1/2</sup> 32 bit bus master DMA data exchanges across PCI interface at 132Mbytes/sec for minimum host processor intervention.

� Autosense compatibility with 5v and 3.3v PCI busses.

i¿1/2 Fully PCI 2.2 compliant, compatible with all commercially available motherboards, proper interrupts sharing.

 $i \ge 1/2$  Intelligent hardware:Downloadable Field Programmable Gate Array programming with multiple operating modes. Field upgradeable so that new features related to voice and/or data can be added when they become available.

ï¿<sup>1</sup>/<sub>2</sub> Power: 800mA peak, operational 300mA max at +3.3v or 5v.

ï¿1/2 Temperature range: 0 - 50C.

Optional DSP daughterboard on the A400d

ï¿1/2 G.168-2002 echo cancellation in hardware.

ï¿<sup>1</sup>/<sub>2</sub> 1024 taps/128ms tail per channel on all channel densities.

ï¿<sup>1</sup>/<sub>2</sub> DTMF decoding and tone recognition.

 $i_{\dot{c}} i_{2}$  Voice quality enhancement: Octasic music protection, acoustic echo control and adaptive noise reduction.

Price: £275.20

Options available for Sangoma A400 FXO FXS Analogue Card PCI (A400BRM) :

#### **FXS Modules Required**

Not Required -, 1 x 2 port FXS (+£59.00), 2 x 2 port FXS (4 ports) (+£118.00), 3 x 2 port FXS (6 ports)
(+£177.00), 4 x 2 port FXS (8 ports) (+£236.00), 5 x 2 port FXS (10 ports) (+£295.00), 6 x 2 port FXS (12 ports)
(+£354.00), 7 x 2 port FXS (14 ports) (+£413.00), 8 x 2 port FXS (16 ports) (+£472.00), 9 x 2 port FXS (18 ports)
(+£531.00), 10 x 2 port FXS (20 ports) (+£590.00), 11 x 2 port FXS (22 ports) (+£649.00), 12 x 2 port FXS (24 ports) (+£708.00).

#### **FXO Modules Required**

Not Required -, 1 x 2 port FXO (+£65.00), 2 x 2 port FXO (4 ports) (+£130.00), 3 x 2 port FXO (6 Ports) (+£195.00), 4 x 2 port FXO (8 Ports) (+£260.00), 5 x 2 port FXO (10 Ports) (+£625.00), 6 x 2 port FXO (12 Ports) (+£390.00), 7 x 2 port FXO (14 Ports) (+£455.00), 8 x 2 port FXO (16 Ports) (+£520.00), 9 x 2 port FXO (18 Ports) (+£585.00), 10 x 2 port FXO (20 Ports) (+£650.00), 11 x 2 port FXO (22 Ports) (+£715.00), 12 x 2 port FXO (24 Ports) (+£780.00).

### **Require Echo Cancellation?**

No, Yes (+£200.40).

#### **Require a Slave Card?**

- Not Required -, 1 x Slave card (+12 Ports) (+£154.60).