# Sangoma 16 Port T1/E1/J1 PCIe w/EC HW w/Breakout Panel and 648 Cable (A116-DEPNLKIT)

Product Name: Sangoma 16 Port T1/E1/J1 PCIe w/EC HW w/Breakout Panel and 648 Cable (A116-DEPNLKIT)
Manufacturer: Sangoma
Model Number: A116-DEPNLKIT

Sangoma 16 Port T1/E1/J1 PCIe w/EC HW w/Breakout Panel and 648 Cable (A116-DEPNLKIT)
The Sangoma A116DE PCIe, 16 spans, with H/W Echo Cancellation is part of Sangoma's family of Advanced Flexible Telecommunications hardware product line – using high-performance PCI Express interface, providing superior performance in critical systems all over the world. The Sangoma A116DE PCIe, 16 spans, with H/W Echo Cancellation supports up to 32.8 Mbps of full duplex data throughout 480 voice calls using 16 T1/E1/J1 spans.
Sixteen spans of T1, E1 or J1 available with carrier-grade hardware echo cancellation.

ï¿½ 16 T1/E1 ports with PCI Express interface
ï¿½ Support for Asterisk&reg; and FreeSWITCH&reg;
ï¿½ Lifetime warranty (with product registration)

Typical A116 Applications:

ï¿½ Call Centers
ï¿½ Value-Added Services
ï¿½ Large IVR Systems
ï¿½ Gateways and Soft Switches

With Sangoma boards, you can take advantage of hardware and software improvements, as soon as they become available. The Sangoma A116, like all boards in Sangoma's AFT family, is field-upgradable with crash-proof firmware.
Choose the Sangoma A116E and A116DE, equipped with world class DSP hardware to achieve carrier-grade echo cancellation and voice quality enhancement functions for telecommunication systems.Also includes:

ï¿½ 1U Rackmountable Breakout panel with 16 RJ45 ports: Contains a cable with a 68-pin connector at one end and 16 RJ45 female connectors on a rackmountable faceplate at the other end.
ï¿½ 6-Feet punch down cable with a 68-pin connector at one end and loose 68 color coded wires at the other end. Can be punched down or wire wrapped with the end-users connector block of choice.

Technical Specifications

ï¿½ Sixteen T1/E1 ports with optimum PCI–Express interface for high performance voice and data applications
ï¿½ Mix T1 channel banks and E1 networks with full channel synchronization. TDM clocking mode lets network timing to be passed from a network-connected DS0 to any or all of the other ports so both T1 and E1 are supported simultaneously
ï¿½ Support for Asterisk&reg; and FreeSwitch&reg;
ï¿½ Fully compatible with all commercially available motherboards&mdash;proper PCI-standard interrupt sharing without manual tuning
ï¿½ Dimensions: Full height by half-length (107mm x 176mm)
ï¿½ Connector: Dense 68 pin SCSI type interface
ï¿½ Intelligent hardware: Downloadable FPGA programming with multiple operating modes; add

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new features related to voice and/or data when they become available

ï¿½ Line decoding: HDB3, AMI, B8ZS

ï¿½ Framing: CRC-4, Non CRC4, ESF, SF, D4, J1 (Japan)

ï¿½ PCI Express Bus Version: 1.1

ï¿½ Maximum operational power: 5.5 W (1.67 A @ 3.3 V)

ï¿½ Temperature range: 0 &ndash; 50 &deg;C

ï¿½ Ring buffer DMA handling for minimum host intervention and guaranteed data integrity on high volume systems

ï¿½ Supports Robbed Bit Channel Associated Signaling (CAS) and ISDN PRI

ï¿½ T1/E1 and fractional T1/E1, multiple channel HDLC per line for mixed data/TDM voice applications

ï¿½ Optimized per channel DMA streams and hardware-level HDLC handling unload the host CPU

ï¿½ Uses raw bitstream interfaces to support arbitrary non-standard line protocols, such as non-byte aligned monosynch or bisynch

ï¿½ WANPIPE&reg; routing stack is completely independent of TDM voice application for total system reliability

ï¿½ WANPIPE&reg; supports certified, field-tested, and reliable Frame Relay, PPP, HDLC, and X.25

Optional DSP Hardware Echo Canceller Daughterboard

ï¿½ G.168&ndash;2002 echo cancellation in hardware

ï¿½ 1024 taps/128 ms tail per channel on all channel densities

ï¿½ DTMF decoding and tone recognition

ï¿½ Voice quality enhancement: music protection, acoustic echo control, and adaptive noise reduction

ï¿½ Does not increase the physical size of the card, and no additional slot is required

Operating Systems

ï¿½ Windows&reg; 2003, Windows&reg; XP, Windows&reg; Server 2008, Windows&reg; Vista, Windows&reg; 7

ï¿½ Linux (all versions, releases and distributions from 1.0 up)

T1/E1 Status Alarms

ï¿½ RED: Telco Red Alarm Condition

ï¿½ OOF: Out of Frame

ï¿½ LOS: Receive Loss of Signal

ï¿½ AIS: Alarm Indication Signal

ï¿½ RAI: Remote Alarm Indication (Yellow Alarm)

Line Protocols
Voice CAS, MFC/R2, PRI, ATM, Frame Relay, X.25, HDLC, PPP, SS7, Transparent bit-stream, BSC
Higher Level Protocols
IP/IPX over Frame Relay/PPP/HDLC/X.25, X.25 over Frame Relay (Annex G), BSC over X.25, SNA over X.25, PPPoE,PPPoA, IP over ATM
Certification (Pending)

ï¿½ FCC Part 15 Class A, FCC Part 68, CISPR 22, EN 55022, Class A, CIPSR 24, AFIC-2016, IEC 60950, JATE

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Diagnostic Tools
WANPIPEMON, System Logs

Brakeout Panel and Punch Down Cable
**Price: £5,216.00**