

IRIS - IVDX

INTEGRATED VOICE AND DATA EXCHANGE



Internet proliferation is changing the global telecom landscape, which requires that modern telecommunication systems are designed to seamlessly integrate on the internet highways to meet the dynamic needs of the marketplace. Technological supremacy is a dream pursued by Team Coral, with a knack of deploying IP for mainstream business. Thus, emerged, IRIS IVDX with a vision to meet these exacting demands. It is capable of handling Data as freely as it would handle Voice traffic. The new Digital Millennium is witnessing an entirely new range of products and services, thanks to the all-encompassing convergence. The basic switch would be capable of transmitting data received over LAN and/or ATM as the case may be. This enhanced functionality allows free migration of our communication channels over Internet Protocol (IP), keeping pace with technological growth. The system is designed on a Free-Port architecture, with distributed power supply and processor on every card. The backplane is based on UTOPIA, HDLC and Compact PCI. This powerful platform presently supports 7500 Ports & can support upto 43000 Ports.

SUPERIOR DESIGN

Built around a powerful 32 Bit RISC processor with fully distributed architecture not only allows faster processing but also optimum utilization of main CPU time. Compact 32 Port, fully featured Line Cards are based on DSP (DUSLIC) design to support features like DTMF generation & detection, Caller ID generation for Analogue Extensions, Polarity Reversal, On-hook transmission, Echo cancellation, Message Wait Lamp and Fax/Modem detection. A number of line parameters like battery feeding, impedance matching, hybrid balancing, frequency response, ring frequency & amplitude, off-hook thresholds and 12/16 KHz. feeding are programmable making this one of the most flexible designs, compatible with global specifications.

INTEGRATED TEST AND DIAGNOSTIC FEATURE

The IRIS-IVDX offers unique diagnostic tools through an in-built line tester, which is capable of measuring a number of line parameters for fault diagnosis and maintenance operations. It can predict the nature and type of fault along with the distance at which the fault is located.

ANIC BASED CO-LINE INTERFACE CARDS

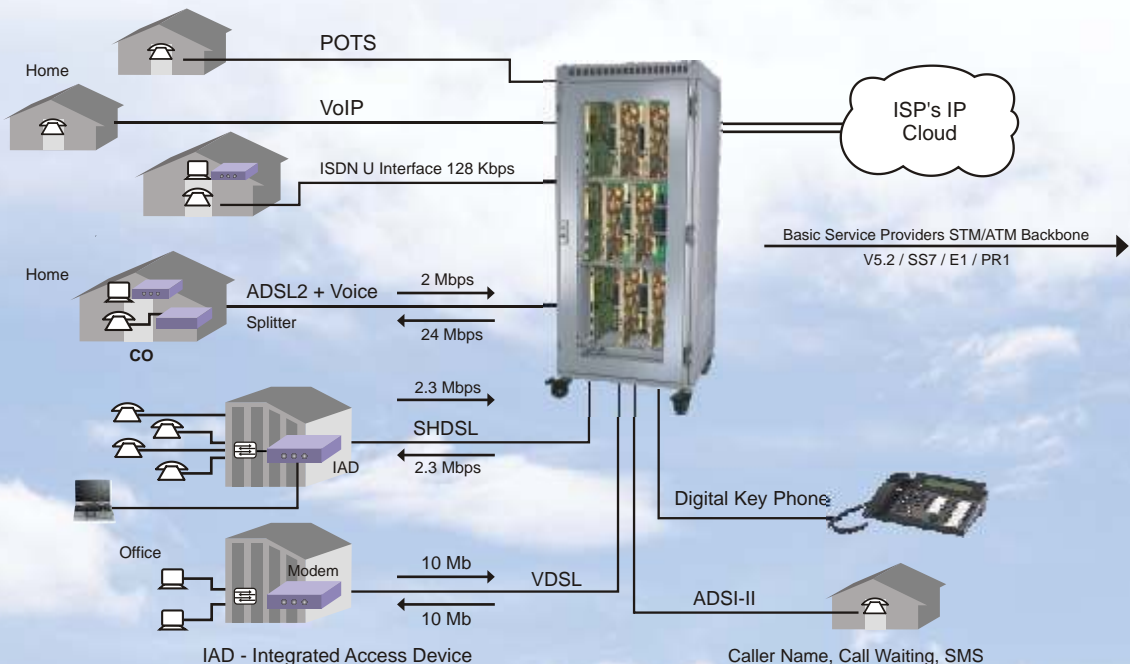
The analogue network interface cards are based on DSP (ANIC) technology replacing the traditional data access arrangement, codec and hybrid components. This card supports features like on-hook transmission and reception, programmable ring detection, detection of metering pulses, programmable gain, impedance matching, etc. making this card flexible to meet worldwide standards.

HOT DUPLICATION

IRIS-IVDX offers full redundancy of control cards in True Hot Standby Mode . In the event of failure of the Active Set, the changeover to the Standby Set is automatic and transparent, without any disruption of services. New cards are hot swappable on an active system.

INTELLIGENT REMOTE SHELVES ON OPTICAL FIBER

The Remote Shelf can go upto a distance of 35 Km from the Main Exchange. Both Single Mode and Multimode Fiber can be used as the media, with direct termination on to the Remote Shelf cards. The Remote Shelf is also equipped with its own intelligence , effecting automatic takeover on disruption of fiber connectivity, without any manual intervention.



QSIG NETWORKING

Comprehensive QSIG compliance with full feature transparency, based on ECMA, ETSI & ISO Standards, with support over both ISDN (BRI & PRI) and IP.

AUDIO CONFERENCING

Upto 64 Party Conference support which can be supervised as well as unsupervised (Meet Me, Progressive, Add On) involving any kind of circuit (External as well as Internal). Conference Bridges such as 2x32 Party, 4x16 Party, 8x8 Party, can also be configured.

VOICE OVER IP

IN-SKIN VoIP card enabling direct connectivity to IP Cloud (H-323/SIP), with the ability to convert analogue signals to packets and routing calls through the IP backbone. IRIS IP PBX uses standard codec with in-built Echo cancellation

ISDN "U" INTERFACE

Extends ISDN "U" Bus on a Single pair of copper wire upto a distance of 5 Kms from the exchange. All standard ISDN Equipment such as ISDN Phones, Video Conferencing equipment, etc, can be terminated using NT 1.

AUTOMATIC CALL DISTRIBUTION & MIS REPORTING

Extensive inherent ACD capabilities with comprehensive and customizable MIS, both on realtime basis or on the historical data intelligent routing and landing of calls within various ACD groups can be configured, for Call Centre applications.

THE BROADBAND DEMAND

Apart from the standard functionality of a PBX, IRIS IVDX offers unrivalled on-board DSL with online capabilities and higher quality at reasonable prices. The exponential growth in the demand of bandwidth can be met through IRIS which has the ability to carry Voice, Data & Video on the existing copper network, by incorporating technologies to support various DSL flavours, to overcome the last-mile bottleneck. IRIS Broadband telecommunication will enhance access to the Internet and other high speed telecom networks, promising greater online capabilities and higher quality at reasonable prices. The exponential growth in the demand of bandwidth can be met through IRIS which has the ability to carry Voice, Data & Video on the existing copper network.

The IRIS platform has solutions to successfully deploy the Digital Subscriber Line (DSL) access networks offering a scalable solution for providing broadband services, thereby making it cost effective for carriers to provide new IP services to subscribers. IRIS IVDX enables simultaneous access of broadband services and traditional telephone on the same copper wire. The IRIS IVDX offers a bouquet of DSL technologies, to suit the need of each type of customers. Each of these technologies are offered as plug-in cards, thereby providing flexibility to service provider for planning their network. The DSL technologies which can be offered are elucidated below.

ADSL

ADSL-Asymmetrical Digital Subscriber Line technology is capable of carrying data and one voice channel over single pair of copper cable, typically to meet the requirements of residential or SOHO users. The ADSL line card enables carriers and service providers to offer converged services to customers using ADSL variants viz. G.dmt, ANSI T1.413 and G.lite, based on Discrete Multi-Tone (DMT) from the same hardware. The ADSL line card supports download speeds of upto 24 Mbps and upload speeds of upto 2 Mbps. A standard ADSL modem can be used as the customer premises equipment (CPE), with an in-built splitter for splitting voice and data. This modem can be connected to the computer or local LAN through the USB port or Ethernet port.

SHDSL

SHDSL- Symmetric High-Speed Digital Subscriber Line (G.Shdsl), is a superior delivery mechanism for business and corporate clients, who require reliable, high speed bandwidth, with pair and improved line coding techniques, the IRIS G.Shdsl Line card enables carriers and service providers to rapidly deploy multiple revenue-generating data and voice services, allowing synchronized delivery of voice packet and data, to increase returns on investment, improved rates and reach. With speeds upto 2.3 Mbps (both upload as well as download) on a single copper pair and improved line coding techniques, the IRIS G.Shdsl Line card enables carriers and service providers to rapidly deploy multiple revenue-generating data and voice services, allowing synchronized delivery of voice packet and data, to increase return on investment. Integrated Access Device (IAD) must be used as CPE for connecting to SHDSL, which provides an Ethernet port for connecting to local LAN and multiple voice ports for connecting telephone instruments.

VDSL

VDSL-Very High Bit Rate Digital Subscriber Line is currently the fastest technology for communication over conventional copper infrastructure. IRIS VDSL based line cards enable transmission of full duplex 10 Mbps Ethernet (10 BaseS) over standard copper wire, upto a distance of 1.3 Km. The VDSL Line card is based on QAM line code and therefore is fully compliant with ETSI and ANSI VDSL standards. The VDSL card also offers POTS on the same card, enabling both Voice and Data on the same copper pair using a 10 Base S modem as the CPE. The 10 Base S modem gives an Ethernet port alongwith a single voice port for connecting a telephone instrument. VDSL can be deployed to provide a number of revenue generating applications like • Ultra-high speed data access • Providing multiple TV channels within apartment blocks • Streaming Video • Video Conferencing • Data and Video over the same line.



TECHNICAL SPECIFICATION

RINGER VOLTAGE

75 V AC, 20 Hz. (Programmable)

STORAGE MEDIA

Flash ROM 32 MB (min)

HDD/SDD/PCMCIA 128 MB (min)

INTERFACE / NETWORKING

Analog CO Lines

Analog DID/DOD/BWT (LD)

Analog E&M (2W/4W)

Magneto/Ring Down

Digital ISDN BRI ('So' & 'U')

Digital ISDN PRI (30B+D)

Digital CEPT/E1/T1/J1

QSIG on BRI/PRI / IP & SHDSL

VOIP in-skin card

TDMOIP

PRI/E1 over optical interface

STM 1

WIRELESS STANDARDS

Wi-Fi 802.11 b/g

CTI/CONTACT CENTRE SUPPORT

TAPI/TSAPI/CSTA compliant

Predictive Dialer

Progressive Dialer

Voice Logger

IN-SKIN DATA INTERFACES (xDSL)

Asymmetric Digital Subscriber Line (ADSL)

Symmetric High Bit Rate Digital Subscriber Line (SHDSL)

Very High Speed Digital Subscriber Line (VDSL)

CONFERENCING

Upto 64 Party Audio Conferencing

Video Conferencing supported upto 768K & on IP (H.320)

EXTENSION EQUIPMENT

Single Line Telephone (SLT)

Proprietary Digital Telephones

Digital Telephones with Graphical Display

Standard IP Phone

TRAFFIC HANDLING

BHCA : 500,000

BHCC : 300,000

CLI FEATURE

Available on both Digital & Analogue terminals, supported in both DTMF & FSK format. CLI on Analogue CO (P&T) trunks transmitted to Analogue extensions, with name display ADSI-II compliant CID CW support

LOOP RESISTANCE

Normal Loop Extn. 1200 Ohms

Long Loop Extn. 3000 Ohms

PERIPHERAL SUPPORT

Call Detail Recording (A S M D R)

Voice Mail (In-skin and third Party)

PC based Operator Console

Large Display Operator Consoles

PROTOCOLS SUPPORTED

DTMF

Loop Dial

R2 MFC (Indian Modified)

R2 MFC (CCITT)

PLCC Signaling

QSIG

V5.2

BACKBONE SUPPORT

ATM

IP (SIP/H.323)

Inspiring convergence through technological innovations and turning the broadband dream to reality.
Experience the "Coral phenomena"!!!

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