Digital Loop Carrier System

HTC-1100E

OVERVIEW

The HTC-1100E Digital Loop Carrier System (DLC) is a new generation DLC System that is an access platform capable of delivering any services from POTS to xDSL over copper, fiber or wireless transport media.

In view of the telecommunications infrastructure that has undergone a great deal of change recently. DLC technology and the local loop will become more important in the future in delivering the new services that customers will require.

With the modular building block approach, HTC-1100E can support flexible network topologies and system requirements via various transmission medias, to provide a wide range of telecommunication services to subscribers. Furthermore, HTC-1100E can provide hassle free development to improve telephone density in areas of high telephone demand with the build-in optical connection.

KEY FEATURES

- Comply with ITU-T/ETSI Standards for transmission and voice interface
- In compliance with ITU-T G.965 V5.2 interface (IDLC)
- V5 is compatible to major switch vendors
- Capable of serving from 6 to 2000 non-blocking channels --- Pay as you grow
- Providing Automatic Concentration between terminals that enables the System to have 2,000 lines capacity; 64km fiber-span between two terminals
- Integrated analog and digital services
  - -POTS, Payphone, HotLine, 2W/4W E&M, ISDN
  - -E1/FE1 (G.703), Nx64k (V.35/V.36)
  - -ADSL/VDSL (mini DSLAM)
  - -IDSL, HDSL, G.SHDSL
- Variety of transmission media can be used G.703 E1, HDSL (ETSI), PDH Fiber (49M), STM-1
- Redundant CPU and transport module come with manual and automatic protection switching; redundant power supply for load sharing and backup
- Plug-and-play design; automatic alarm reporting with visual and audio alert; advanced self-diagnostics

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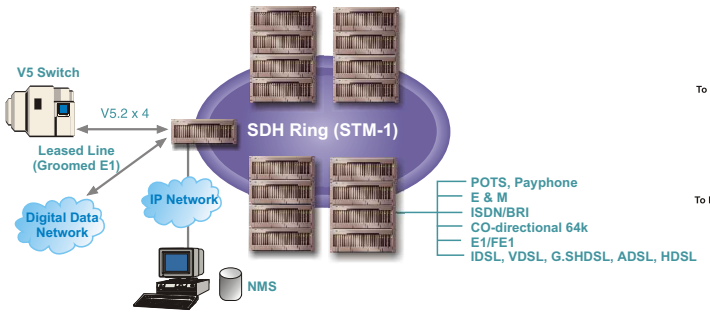
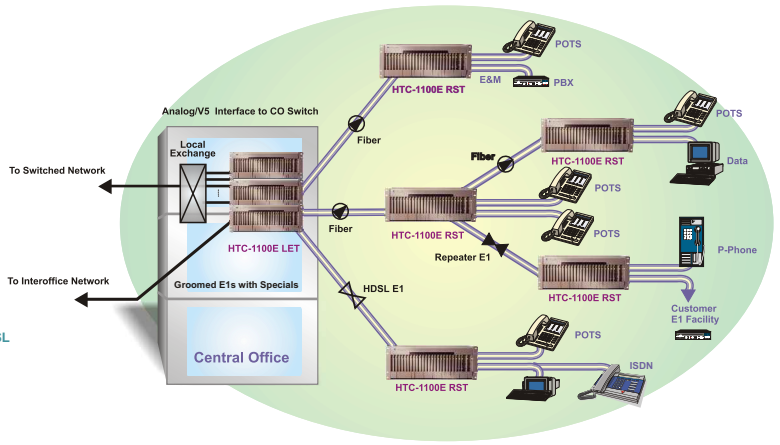
V5 Access Network Application



Application-Tree & Branch



HTC-1100E is composed of a local exchange terminal (LET) connecting to one or more remote subscriber terminal(s) (RST). LET is usually located within a central office, while RSTs are located in customer areas to originate services. It not only utilizes various transport media but also can integrate into any network architecture. Universal, star, drop and insert, tree and branch, and SDH ring configurations are all supported by the flexible topologies of HTC-1100E.

TECHNICAL SPECIFICATIONS

Transmission Media

Rate & Code	E1	2.048 Mbps ±50 ppm HDB3
	PDH Fiber	49.152 Mbps ±50 ppm Scrambled NRZI
	SDH	155 Mbps ±20 ppm Scrambled NRZI
Transmit levels	E1	3.0Vpk ITU-T G.703 Sec.6
	PDH Fiber	-7dBm(laser) @1310nm/1550nm
	SDH	-10dBm(laser) @1310nm/1550nm
Sensitivity	E1	-38dB @2.048Mbps
	PDH Fiber	-34dB @49.152Mbps
	SDH	-28dB @155Mbps

Digital Interface

	Rate	Interface	Port No.
G.703 Co-directional 64Kbps	64Kbps	4-wire	3
N*64Kbps Channel Unit	N*64Kbps (N=1...30)	V.35/V.36	1
E1 Channel Unit	2.048 Mbps	120Ω	1
QE1 Channel Unit	2.048Mbps	75Ω	4
HDSL Channel unit	2.048Mbps	4-W	1
ISDN Channel Unit	160Kbps	ISDN 'U'	2
G.SHDSL Channel Unit	2.048Mbps	2W	1

Voice Interface

Impedance	600/900Ω
Insertion Loss (Remote)	2dB ±0.5dB
Return Loss	ITU-TG.122
2 Wire	RL>20dB 400~3KHz
4 Wire	RL>28dB 300~3KHz
Frequency Response	300Hz~3.4Hz(+0.5, -1.0dB)
Idle Channel Noise	≦-65dBm p ITU-T G.712
Crosstalk (line to line)	≦-67dBm p
Longitudinal Balance	ITU-T G.117 & G.121
Voice Compression	G.711 / G.723 / G.726 / G.729ab

General

System Synchronization	External / Line / Internal
Alarms	Critical/Major/Minor with Alarm Cut-off
	Alarm thresholds software programmable
Power	
Channel Bank Assembly	-42 VDC~63 VDC @ 4 Amps max.
Outdoor Cabinet	220V/110V, 50~60Hz

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