Subscriber Networks

Explorer® 2100
Digital Home Communications Terminal

Description

The Scientific-Atlanta Explorer® 2100 Digital Home Communications Terminal (DHCT) provides support for digital services and traditional, non-scrambled analog services delivered through a hybrid fiber/coax (HFC) network. The Explorer DHCT features a 32-bit, 130 MHz RISC microprocessor; an Internet Protocol-based, real-time reverse path DAVIC transmitter; and an out-of-band control channel that can support interactive or session-based services.

The Explorer 2100 DHCT contains 16 MB of total memory that can support services such as video-on-demand, e-mail, or Internet access, as well as other future applications. The Explorer 2100 DHCT also supports both digital broadcast services and applications. Finally, the Explorer 2100 DHCT includes industry standards support (OpenCable, CableLabs/SCTE, DAVIC), which make these terminals ready for future applications and preserves its longevity.

Features

Reverse Path Data Transmitter	• Allows instantaneous, IP-based, “real-time” two-way communication between the DHCT and the headend • Enables MSO to offer two-way services such as Internet browsing, video-on-demand, and e-mail • Transmits at up to 1.544 Mbps
MPEG 2 MP@ML Digital Video Decompression	• Allows transport and compression of audio and video • 4 MB of DRAM dedicated to MPEG decompression and graphics • Video resolution up to 720 x 480 pixels
Dolby® AC3® and Musicam Digital Audio	• Supports these digital audio standards
PowerKEY® Conditional Access System	• Secures digital services using an encryption algorithm, from RSA, that mathematically matches pairs of keys
PowerTV® Operating System with HTML Client Engine	• Provides Application Programming Interfaces (APIs) that enable client applications to utilize the resources managed by the operating system for delivering broadcast and interactive services • Upgradeable using a network download

Explorer 2100 Digital Home Communications Terminal

Features, continued

Enhanced Graphics Engine	• Displays up to 65,000 colors simultaneously • Enables high-resolution graphics (640 x 480 pixels) while simultaneously scaling MPEG 2 video
Powerful 32-bit RISC Processor	• Includes 130 MHz clock speed to perform tasks and applications quickly
64 and 256 ITU Annex B QAM Support	• Support of open standard for QAM delivery and demodulation
16 MB Total Memory	• Includes 8 MB CPU DRAM • Includes 4 MB Graphics DRAM • Includes 4 MB Flash EPROM
Analog and Digital Service Tuner	• Allows both non-scrambled analog and MPEG 2 digital channels to be tuned and displayed
Both Internal Security Microprocessor and Smartcard Slot	• Provides an internal method for conditional access as well as an external ability to upgrade the security, if required
Macrovision Copy Protection	• Can support the capability for the MSO to restrict unauthorized subscribers from copying digital services such as pay-per-view and video-on-demand
Universal Serial Bus (USB) Interface	• Supports interconnection with home consumer devices such as printers • Provides USB interface on the front panel
BTSC/SAP Decoder	• Provides stereo sound on analog channels using the baseband left and right audio outputs
S/PDIF Digital Audio Interface	• Supports interconnection with Dolby Digital™ Receivers
Recessed Cavity for Custom Logo	• Allows cable operators to brand the DHCT

Specifications, features and product availability are subject to change without notice.

Explorer, PowerKEY and Scientific-Atlanta, and the Scientific-Atlanta logo are registered trademarks of Scientific-Atlanta, Inc.
PowerTV is a registered trademark of PowerTV, Inc.
All other trademarks are the property of their respective owners.
© 2001 Scientific-Atlanta, Inc. All rights reserved.

Scientific-Atlanta, Inc.
1-800-722-2009 or 770-903-6900
www.scientificatlanta.com

Part Number 738942 Rev. B
February 2001