

# 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 PowerKEY® Conditional Access System

- Supports these digital audio standards
- 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

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## Features, continued

<b>Enhanced Graphics Engine</b>	<ul style="list-style-type: none"><li>• Displays up to 65,000 colors simultaneously</li><li>• Enables high-resolution graphics (640 x 480 pixels) while simultaneously scaling MPEG 2 video</li></ul>
<b>Powerful 32-bit RISC Processor</b>	<ul style="list-style-type: none"><li>• Includes 130 MHz clock speed to perform tasks and applications quickly</li></ul>
<b>64 and 256 ITU Annex B QAM Support</b>	<ul style="list-style-type: none"><li>• Support of open standard for QAM delivery and demodulation</li></ul>
<b>16 MB Total Memory</b>	<ul style="list-style-type: none"><li>• Includes 8 MB CPU DRAM</li><li>• Includes 4 MB Graphics DRAM</li><li>• Includes 4 MB Flash EPROM</li></ul>
<b>Analog and Digital Service Tuner</b>	<ul style="list-style-type: none"><li>• Allows both non-scrambled analog and MPEG 2 digital channels to be tuned and displayed</li></ul>
<b>Both Internal Security Microprocessor and Smartcard Slot</b>	<ul style="list-style-type: none"><li>• Provides an internal method for conditional access as well as an external ability to upgrade the security, if required</li></ul>
<b>Macrovision Copy Protection</b>	<ul style="list-style-type: none"><li>• Can support the capability for the MSO to restrict unauthorized subscribers from copying digital services such as pay-per-view and video-on-demand</li></ul>
<b>Universal Serial Bus (USB) Interface</b>	<ul style="list-style-type: none"><li>• Supports interconnection with home consumer devices such as printers</li><li>• Provides USB interface on the front panel</li></ul>
<b>BTSC/SAP Decoder</b>	<ul style="list-style-type: none"><li>• Provides stereo sound on analog channels using the baseband left and right audio outputs</li></ul>
<b>S/PDIF Digital Audio Interface</b>	<ul style="list-style-type: none"><li>• Supports interconnection with Dolby Digital™ Receivers</li></ul>
<b>Recessed Cavity for Custom Logo</b>	<ul style="list-style-type: none"><li>• Allows cable operators to brand the DHCT</li></ul>

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



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