Cisco 4585DVB MPEG-4 HD Interactive Set-Top Box

The Cisco® 4585DVB MPEG-4 High-Definition (HD) Set-Top Box offers subscribers the latest enhancements in cable television viewing. This set-top box features MPEG-4 part 10 H.264 standard-definition (SD) and high-definition capability and features comprehensive interactive capability using the DOCSIS® 2.0 compliant cable modem. Cisco 4585DVB gives consumers a rich home entertainment experience with high-definition picture clarity, the movie theater experience of surround sound, and the convenience of on-demand services such as video on demand.

Cisco 4585DVB is compliant with DVB-C standards and MPEG-2 and MPEG-4 standards. It supports PAL video formats, and is designed to comply with legally required safety, emissions, and immunity specifications. With its smartcard reader, it is built to support renewable security.

Figure 1.   Example of Cisco 4585DVB HD MPEG-4 Interactive Set-Top Box

Features

- DVB-C video tuner and cable modem tuner

- Multiformat video decoder capable of high-definition MPEG-2 and MPEG-AVC (H.264) decoding

- Support for multiple output formats (576i, 576p, 720p, and 1080i) to allow optimum picture performance with both standard TVs and HDTVs

- Embedded DOCSIS 2.0 compliant cable modem

- Connection of an HDTV to the set-top box through an HDMI® connector

- Digital audio output to connect easily to high-end audio equipment

- Ethernet port for connection to internal cable modem or home network

- USB 2.0 host port for connectivity

Table 1.   Front Panel Features

Feature	Description
Controls	8 buttons: Power On/Standby, Home, TV, Up, Down, OK, Left, and Right
Clock display	4-digit, 7-segment blue LED display
Indicators	3 LED indicators for cable modem connection (blue), infrared (IR) (blue), and Power On/Standby (blue/red)
Other	IR receiver

Back Panel Features

Figure 2 shows the back panel, and Table 2 lists back panel features.

Figure 2.   Example of Cisco 4585DVB Back Panel

Table 2.   Back Panel Features

Feature	Description
Connections in	Cable in (IEC female connector)
Connections out	HDMI, SCART, and SPDIF digital audio output (optical); 10/100BaseT Ethernet; and USB 2.0 host port
Other	ISO7816 smartcard
Power connector	DC input connector for external power supply

Product Specifications

Table 3 lists product specifications for the Cisco 4585DVB.

Table 3.   Product Specifications

Specification	Value
Audio and Video Outputs	
Inputs and outputs	• IEC 169-2 female connector: RF input • HDMI output • SCART • Digital audio output: optical • 10/100BaseT Ethernet port • USB 2.0 host port
HDMI output with High Bandwidth Digital Content Protection (HDCP) copy protection	• HDMI provides uncompressed digital video and audio in a simple, user-friendly connector • HDMI combined with HDCP is designed to provide the optimal, secure connection to an HDTV set that supports the HDMI with an HDCP interface
USB 2.0 (host) high-speed data output	Provides a 480-Mbps output for connection to devices such as external hard drives (USB support requires middleware and application support for functionality)
Tuning and Decoding	
Multiformat video decoder	• Allows decoding and presentation of audio and video in both MPEG-2 and MPEG-4 part 10 formats • SD model formats: MPEG-2 MP@ML, MPEG-4 Part 10 MP at Level 3.0, and HP at Level 3.0 • HD model formats: MPEG-2 MP@ML and MP@HL, MPEG-4 Part 10 MP at Levels 3.0 and 4.0, and HP at Levels 3.0 and 4.0 • Supports multiple picture formats (576i, 576p, 720p, or 1080i) to allow optimum picture performance with both standard TVs and HDTVs

Specification	Value
Multiformat audio decoder	Supports tuning of digital audio MPEG-1 Layers 1 and 2, MP3, MPEG-2 Layer 2, AC3 Dolby Digital, and MPEG-4 AAC audio formats
Independent DOCSIS 2.0 cable modem with 200MHz processor	• Allows IP-based, real-time, two-way communications between the set-top box and the headend • Cable modem has a separate processor and dedicated memory from the set-top processor and memory to achieve optimum performance without impact on set-top functions
10/100 Ethernet	Ethernet port can provide high-speed cable modem data service or connectivity to main processor for multiroom applications (requires middleware support)
Powerful graphics engine	Supports high-resolution graphics up to 720 x 576
Memory/Storage	
Memory configuration	• 256 MB DDR2 RAM for system and applications • 64 MB DDR2 RAM for video decoding • 128 MB Flash memory • 128 KB EEPROM
Processor	
Powerful Broadcom BCM7206 processor	Fast CPU (1000+ DMIPS) delivers quick tuning changes and on-screen response times
Data Transmission and Tuner	
Video tuners	One tuner
QAM 64 and 256 ITU J.83 Annex A support	DVB-C (EN 300 429) compliant for QAM delivery and demodulation
Conditional Access and Security/Operation System/Application	
Smartcard	ISO7816 smartcard reader for renewable security
Conditional access system	Compliant with DVB (ETR 289) Common Scrambling Algorithm
Macrovision copy protection (optional; requires a separate agreement between the cable operator and Macrovision Corp.)	Allows cable service providers to add another layer of copy protection software, called Macrovision, designed to restrict unauthorized subscribers from making analog copies of digital transmissions.
Power Supply	
Power supply	External 240 VAC 50Hz inline power supply with separate power cord
Dimensions	
Product (W x D x H)	Approximately 280 mm x 190 mm x 58 mm (11.0 in. x 7.5 in. x 2.3 in.)

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