



Video

Access Platform & Gateways

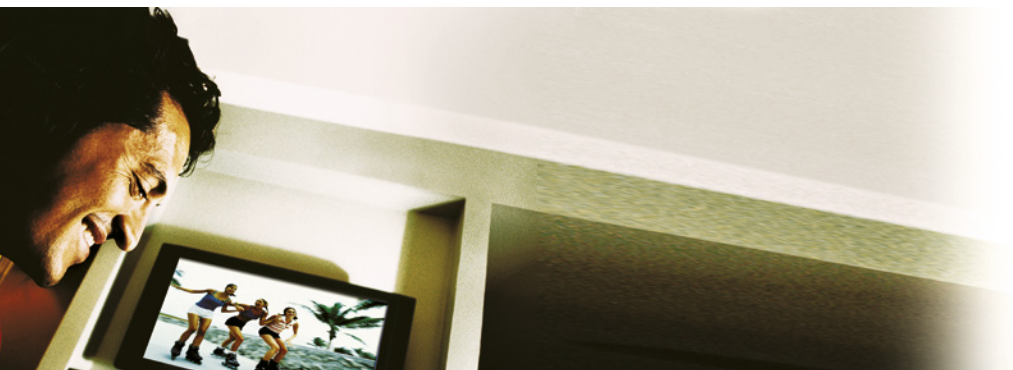
DCI1500

Broadband Interactive Cable Decoder

THOMSON



OPTIMISED DESIGN FOR MULTIPLE BUSINESS APPROACHES



Cable

KEY CHARACTERISTICS:

- Compliant with open standards (DVB, DOCSIS, multiple conditional access, ..)
- Designed for worldwide deployment
- Built-in Ethernet port enables broadband connectivity

BENEFITS:

- Optimized for multiple business models
- Broadband port can be used for IP content delivery

FEATURES:

- Enables a wide range of interactive services:
 - Free and Pay-TV access
 - Pay-per-view
 - User friendly channel surfing
 - Advanced program selection
 - Broadcast interactivity
- 2-way interactive TV
 - Home shopping, betting, etc...
 - Walled garden services
- Supports multiple Conditional Access solutions
- Supports multiple Middleware solutions
- Provisions for OCAP / DVB-MHP
- Living-room or second-room decoder
- Broadband connectivity via external DOCSIS or DSL modem

THOMSON
images & beyond



Video

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DCI1500 - Broadband Interactive Cable Decoder

Technical Specifications

BROADCAST CHANNEL INTERFACE

| | |
|-------------------|--|
| Modulation | 64, 128, 256-QAM (ITU-J83 Annex A) 64, 256-QAM (ITU-J83 Annex B) ^(*) |
| Symbol rate | 3.5 to 6.9 Msymb/s (ITU-J83 Annex A) 5.05 / 5.36 Msymb/s (ITU-J83 Annex B) ^(*) |
| Channel bandwidth | 6 ^(*) / 8 MHz |
| Frequency range | 96-862 MHz |

BROADBAND DATA INTERFACE

| | |
|-----------|----------------|
| Standard | Ethernet |
| Data rate | 10 / 100 baseT |
| Connector | RJ-45 |

MPEG VIDEO DECODER

| | |
|--------------------|-----------------------------------|
| Standard | ISO13818-2 (MPEG-2) |
| Profile | MPEG-2 Main Profile @ Main Level |
| Supported bit rate | Variable, up to 15 Mbps |
| Aspect ratio | 4:3, 16:9, Pan & Scan, letter box |
| Video Scaling | Variable |

OSD

| | |
|------------|--|
| Colours | 16 / 256 colours |
| Resolution | 2 to 8 bits per pixel |
| Overlay | MPEG stills/live image insertion Partial / full over analogue video |

MPEG AUDIO DECODER

| | |
|---------------------------|---|
| Standard | ISO 11172-3 / ISO 13818-3 (MPEG) Dolby Digital (AC3) |
| Decompression | MPEG Layers 1, 2 (Mono, Dual Channel, Joint Stereo, Stereo) Dolby Digital down-mix to stereo |
| SPDIF audio output format | PCM (decompressed stereo) Compressed Dolby digital (5.1) |

SYSTEM RESOURCES

| | |
|---------------|-----------------|
| Processor | RISC / 166 MHz |
| System RAM | Up to 16 Mbytes |
| Video/OSD RAM | 8 / 16 Mbytes |
| FLASH | 4 / 8 Mbytes |

LOADER

Full code software download mechanism
Authentication of downloaded material

FRONT PANEL

4 digits – 7 segments display ^(*)
3 LEDs
8 keys max
1 smart-card slot

REMOTE CONTROL PROTOCOLS

R2000 (Thomson)
RC-5/6 – RCMM 1.5 (Philips)
NEC ^(*)

OTHER

Hardware support for set-top box pairing/mating
Bi-directional RF loop-through for cable modem daisy-chaining

^(*) Can be supported as option

SOFTWARE

| | |
|----------------------|---|
| Middleware solutions | Simple zapping box with THOMSON OS OpenTV™ Core 1.0 / Core 1.1 - THOMSON control task for OpenTV Core NDS' MediaHighway™ DVB MHP ^(*) OCAP / DSG ^(*) |
| Access control | CONAX™ ^(*) MEDIAGUARD™ ^(*) NAGRAVISION™, VIACCESS™ ^(*) IRDETO™ ^(*) VIDEOGUARD™ ^(*) |

THOMSON look & feel:

| | |
|----------------|---|
| Set-up menu | Automatic channel installation, diagnosis, decoder configuration, parental control |
| Banner feature | Basic & virtual zapping with display of current / next event details, shortcut icons info |
| Mini-guide | Channel list scrolling with resized-video preview |
| Languages | Management of favorite lists Multilingual user interface Multilingual audio Multilingual signaling supported |

Protocols / standards:

TCP/IP
EN 300 472 teletext re-insertion in the composite video signal
EN 300 472 teletext and subtitling decoding
EN 300 743 graphic subtitling decoding ^(*)

INTERFACES

| | |
|-----------------------|--|
| Mains input connector | 12 Volt DC input |
| RF input | IEC-type, female or F type |
| RF output | IEC-type, male or F type (loopthrough) |
| SCART sockets | TV and VCR (with RGB loopthrough) |
| Audio | Twin RCA Stereo audio outputs (left and right) |
| Digital Audio | SPDIF audio output (electrical) |
| Ethernet data port | 10/100 baseT on host CPU ^(*) |
| PSTN modem port | RJ-11 ^(*) |
| Smart card reader | 1 slot, ISO 7816 1, 2 & 3 |

GENERAL DATA

| | |
|---|--|
| Safety and EMC regulations compliant (CE marking) | |
| MTBF | > 80000 hours. |
| Operating temperature range | +5°C to +45°C |
| Mains voltage (DC pack) | 230 Volts +/- 10 % (48/62 Hz) 100-264 Volt ^(*) |
| Power consumption | Max. 15 W |
| Dimensions | 252x155x43 mm |

ACCESSORIES

Remote control with batteries
RF lead
Audio/video lead
DC pack
PSTN lead ^(*)

OPTIONS

V22/22bis to V92 PSTN modem ^(*)
RF modulator (UHF range) (standards : PAL B/G, I, K, D) ^(*)
Channel 3-4 RF remodulator (NTSC) ^(*)
RCA video output ^(*)
Additional pair of L&R RCA audio outputs with second RCA video output (exclusive with SCARTs) ^(*)
S-video output ^(*)
Second smart card reader : ISO 7816 1, 2 & 3 ^(*)