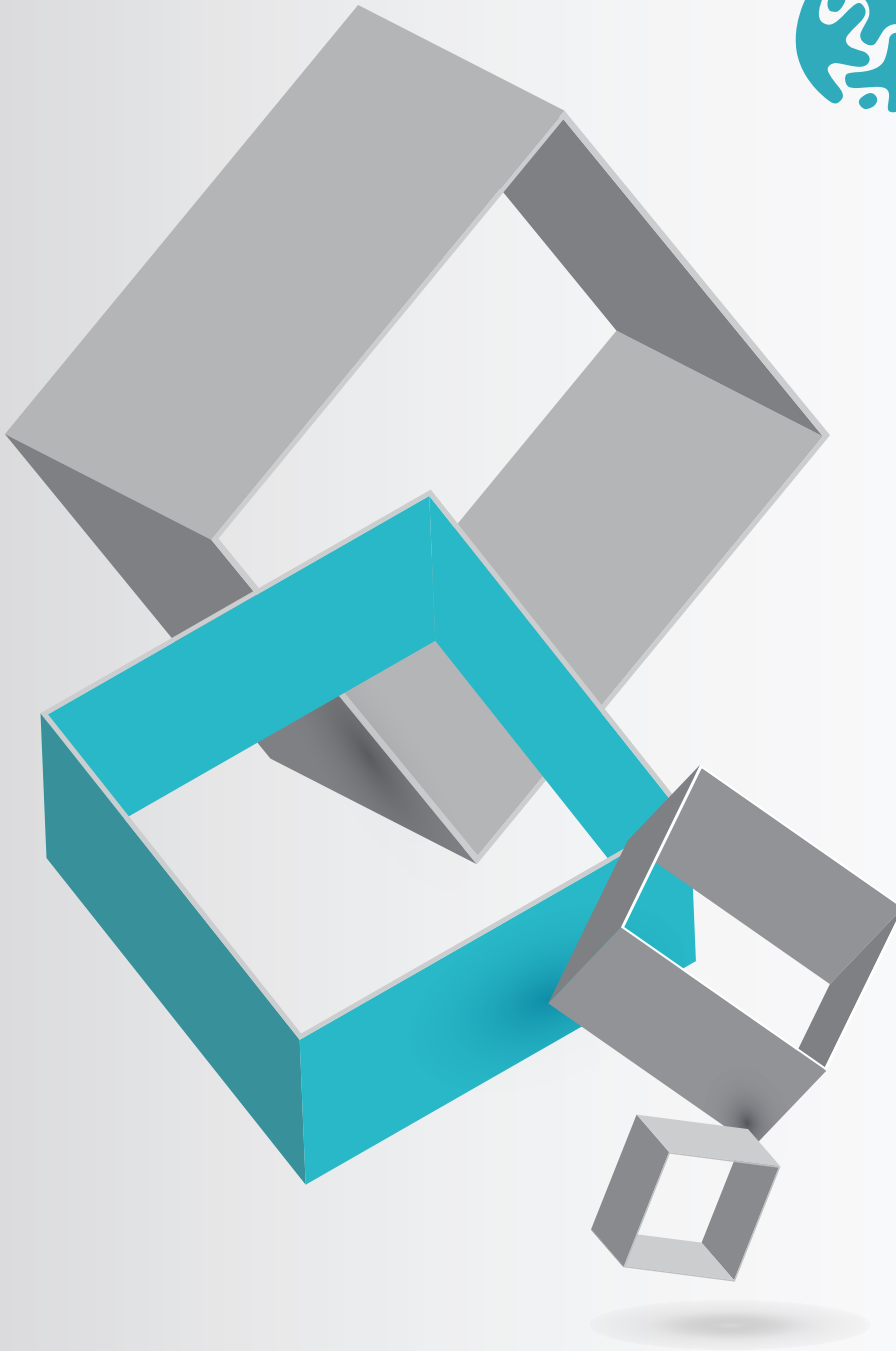
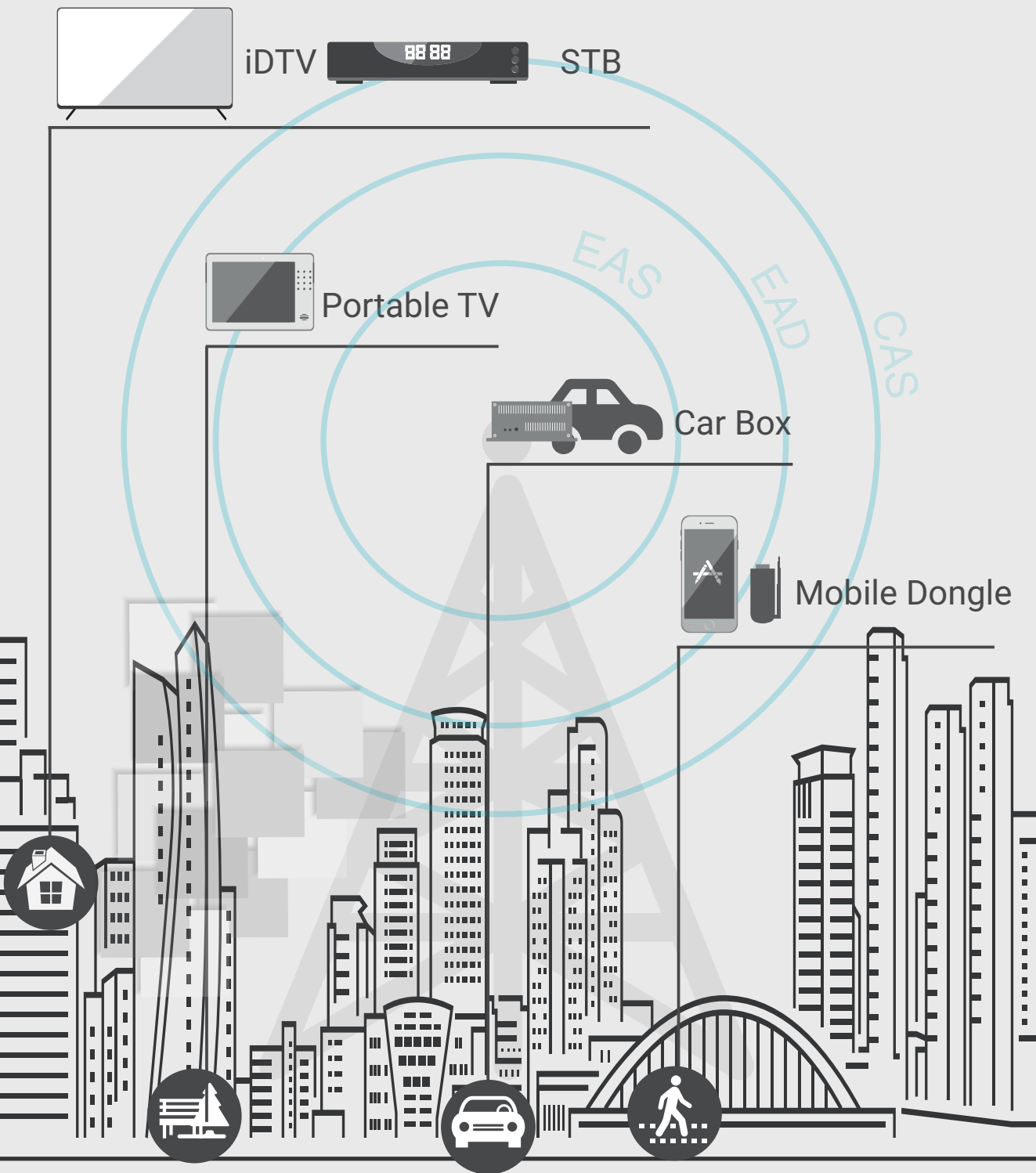




DVB-T2

Solution Proposal





Contents

PREFACE.....	1
ABV CAS.....	2
ABV MAGICUBE MIDDLEWARE.....	4
ABV EAD - Electrical Advertisement.....	5
ABV AMS - Audience Measurement System.....	8
ABV EAS – Emergency Alert System.....	10
PUSH VOD.....	12
ABV DVB-T2 CLIENT PRODUCTS.....	14
STB.....	15
Portable TV.....	21
Car Box.....	23
iDTV.....	25
Mobile Dongle.....	27
CAM.....	28

| Preface

DVB-T2 is a digital satellite transmission system developed by the DVB Project. It makes use of the latest modulation and coding techniques to deliver performance that approaches the theoretical limit for such systems. DVB-T2 is designed as a successor for the popular DVB-T it is gradually replacing DVB-T right now, as new HD services entice users to upgrade their receivers to more efficient DVB-T2 models.

ABV International is a Singapore based company that provides content protection technology with the end-to-end system solutions. The company's sales, support and R&D offices are located world widely. ABV excels in content security and provides low cost but very highly secured DVB compliant Conditional Access System (CAS), as well as the solutions of the ecosystem.

With the plenty experiences and special insights in the terrestrial markets, ABV has realized the importance of DVB-T2 opportunities from the beginning when the standard was found. ABV has invested plenty of resource on the T2 end-to-end product/solution developments during the past years and outcome the various T2 solutions, which include STB, iDTV, Solar Box and TV Extender etc., each solution has different products by meeting with rapid changed market requirements.

ABV CAS |

INTRODUCTION

ABV Conditional Access System (CAS), considered as the core technology to assure the operation of Digital Pay TV, has been successfully completed an audit review of by one of the industry's leaders in security reviews for digital broadcasting and telecom sectors, Farncombe Consulting Group of UK (Now is part of Cartesian).

CERTIFICATION

ABV CAS is developed with the most advanced technology and highest security level. ABV CAS provides a flexible, efficient and secure DVB conditional access solution to the operators. ABV is maintaining EAL4+/EAL5+ technology with a banking security level which is the highest level of security for all the broadcasters and operators. Due to the highly secured technology, continuous stability and careful services, ABV has been widely acknowledged and won very good reputations in the digital TV industry globally.



Now part of



For DVB-T2

For the DVB-T2 network, ABV has a special CAS solution, Cardless conditional access, which is more suitable for the terrestrial market. The principle of the cardless system is almost same as the normal CAS, the mainly difference is on the clients, no more logical smart card and the corresponding smartcard slot.

Reasons of promoting cardless CAS solution for the DVB-T2 market

High level security

The security level is same as the normal CAS, even higher.

Saving more visible and invisible costs

The operators can save much more visible and invisible costs.

Flexible business models

Flexible business models can be selected on the cardless solution, "Free to Box" and "Pay TV" models.

ABV CAS

Adopt the “Free to Box” model

The operators can adopt the “Free to Box” model when the quantity of the subscribers is not enough at the starting phase, operators just to sell the boxes without extra subscription charge.

Can have more revenues besides the advertisement part

The operator can switch the business model from “Free to Box” into “Pay TV” at any time on those premium channels. Through this “Pay TV” method, the operators can have more revenues besides the advertisement part.

The Security Features of ABV Cardless CAS

128/256bits security length

3DES/AES encryption technology

3DES/AES encryption technology for encryption (highest security) as used by few renowned and famous CAS names in the market.

Multi-layer encryption.

Strong key groups and dynamic key generation

Can defend most of attacking methods

In the security chip that can defend most of attacking methods.

Protected all the time

Secure data transfer bus and encrypted control words protected all the time.

Online upgrade

Online upgrade for the smartcards in the event of hacking.

Secure bootloader and strong paring methods

Secure bootloader and strong paring methods (smartcard, STB and chipset).

Using the leader of database Oracle

Keep the safety of the data by using the leader of database Oracle.

Certified by Farncombe

Certified by Security Authority Farncombe.

INTRODUCTION

ABV Magicube middleware solution/product from ABV is an Innovative concept providing numerous ways for operators to value add to their existing infrastructure with ease methods. The types of services provided on this platform can be merged with the existing system and then enhance services significantly with below advantages:

1. Middleware is important for operators to increase monthly revenue pool from the VAS.
2. All widgets in Magicube can be installed and un-installed individually.
3. Highly capable of customization, configuration and integration as per the network requirements.
4. Supports Advertisement, Emergency Alert, Audience Measurement, Push VOD, Push Emails, Short messaging service, Audience Rating etc.



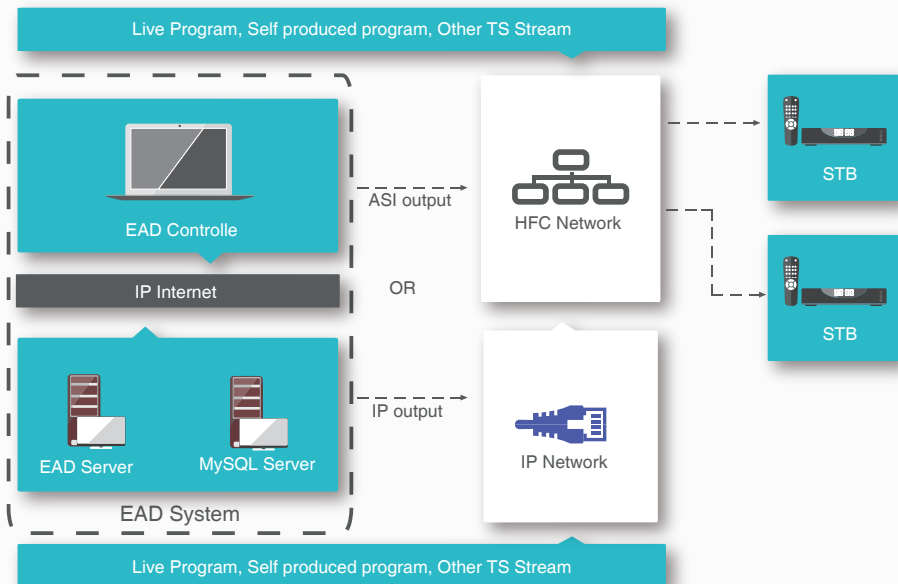
| ABV EAD

Electronic Advertisement System

ABV EAD is an advertising push system developed base on the DVB standard with the private SECTION format. The main function of ABV EAD is to encapsulate the data of the audio, video, image, text, files and other information into a specific format, then transfer these data via DVB-T2 network in the way of "PUSH" to the end users (T2 clients).

The EAD System

This system can meet the requirements of the operators to deliver all kinds of audio, video and advertising data. ABV EAD system contains 3 core components: EAD server, EAD Controller and MySQL database. The system supports ASI and IP broadcast which can satisfy different operators. System design completely complies with DVB standard and MPEG-2 standard.



ABV EAD |

Boot-up Ads

Provides customized and changeable "boot up logos". Every time the STB is restarted, advertising will show up as below picture while the system is loading.



6

Service Ads

The Service Advertisement system is also available for Channel List or the Volume bar which increases the impressions rate of each Ad.



| ABV EAD

Banner Ads

With the addition of Service Advertisement, Operators can show banners with embedded Ads. The system can be totally customized depending on the audience of each channel and the operator needs.



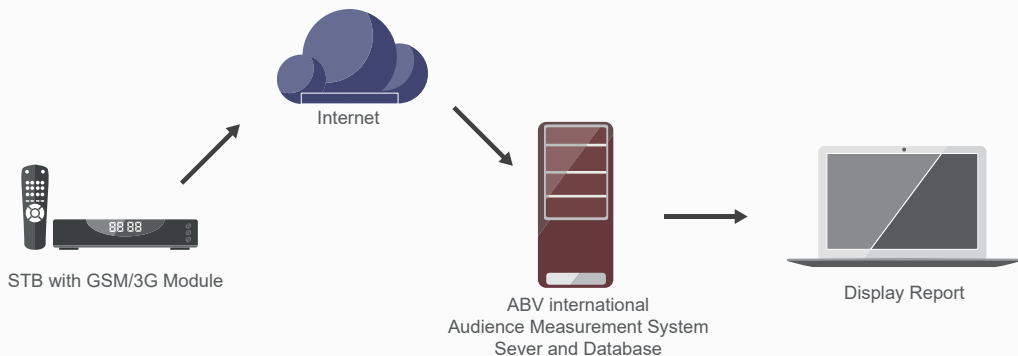
Radio Channel Ads

This same function can be also integrated into the Radio Channels which only have audio content.



Audience Measurement System

The ABV Audience Measurement System showcases a whole range of analytical tools and tracking technology to help broadcasters measure their audience. No personal information is collected, the system ensures only anonymous data is aggregated to provide meaningful metrics while protecting the viewer's privacy. The STB will record every operation of the end users and send back the data to head-end through internet via GPRS/3G. The server will gathering all the data sent from STBs, store them in database and analyze them.



The reports can be generated as per operator requirements. STB Manage is the basic option in the system, the operators need STB Manage option to edit every STB in the database and manage them accordingly, include the STB number, user gender, age, geography, economic, number of households, etc.

System Manament

The other options in the system need the basic data from the STB Manage option to choose data to analyze the audience behavior. The SHARE option can display the share rating of specific periods, channel types, geography, and among other data for each channel. The SHARE form can be exported out as EXCEL spreadsheet, PDF and CSV formats.

ABV AMS

Data, Instantly

The ABV Audience Measurement System utilizes a whole range of analytical tools and tracking technology to help measure their audience. Unleash with ABV International the power of metrics and measurement information.

No personal information is ever collected, the system ensures only anonymous information is used to generate meaningful metrics.

Reports can be used by operators to optimize the impact their advertising campaigns.

Main Features

Real-Time Reporting

Rating reports for desired time periods

Overview Reports

An at-a-glance overview of the data.

Individual Channel Information

Specific Data for each channel.

Multi-channel Comparisons

Ability to compare statistics for multiple channels.

Geographical Data

Ratings at different regions / groups / classes.

Segment Reports

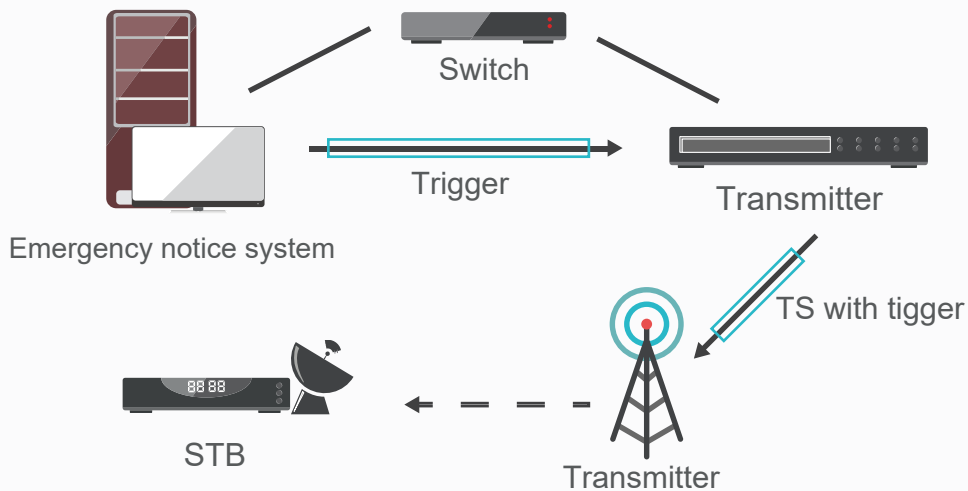
Reports for channel types.

Provider Reports

Report of the channels from same provider.

Emergency Alert System

ABV Emergency Alert system is one of the solutions of ABV middleware. This system can control STB remotely and indicate STB to react accordingly. It can take over the STB's operation privilege from the end user for emergency broadcast or other



The Main Features

Force Channel Switch

System sends a trigger to STB and force the STB to jump into the assigned channel and play.

Flexible

The trigger is highly customizable. It contains parameters such as frequency, TPID, ONID, SID. It allows STB jump to any channel at any time as required.

Controllable

During force broadcasting, all operations of STB from end user can be disabled. STB can only be controlled by the system.

Intelligent

Even if the user power off the STB and power on again, STB will still do the force broadcast until it finish.

Status Resume

After the force broadcast finish, the STB will resume the pervious status and works normally.

| ABV EAS

Addressable

The trigger can be sent to one particular STB, a group of STBs or all STBs. This enables operator to control different STB differently.

Schedulable

The system supports instant react mode and scheduled react mode. STB can react instantly or as per the time table.

Stable

The STB is controlled by ABV special library; the stability is as same as CAS.

Secure

All the commands and triggers are encrypted and can't be hacked or faked; the system has same secure level as CAS.

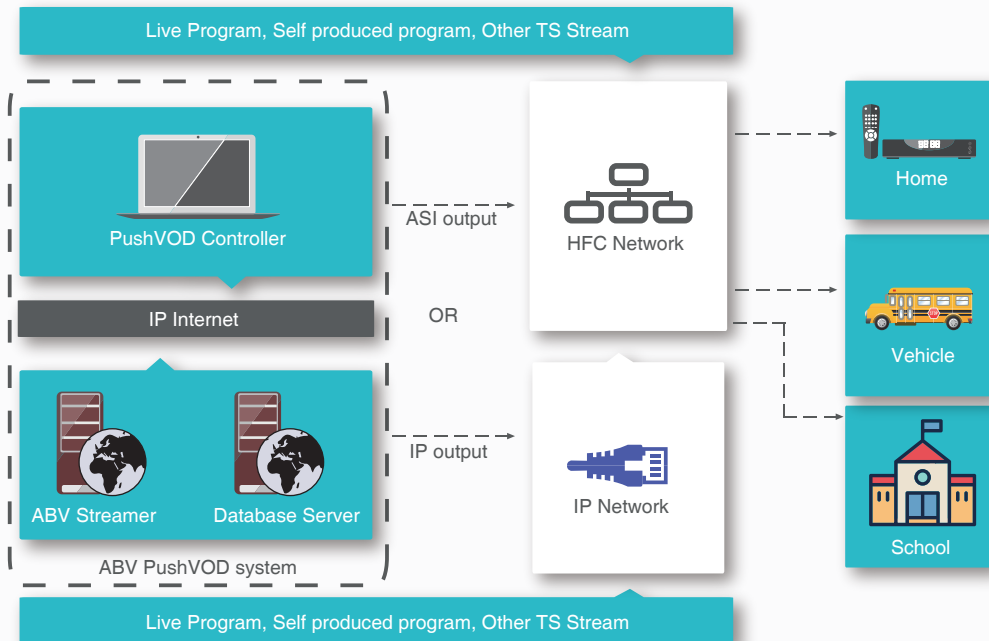
Compatible

Supports DVB-T/T2, DVB-S/S2, DVB-C and all kinds of systems. Also supports many other functions.

Push VOD |

Introduction

PushVOD system supports vehicles STBs and household STBs, meet the customer requirement for different scenarios. When STBs receive all the data pushed by head end, STBs can play audios and videos according to the requirements. System supports channel management and channel group management. Operators can add channels, define different channel group as requirements, and push different contents to different channels.



PushVOD system is an end to end solution includes headend, 3rd-party and STB parts. The headend PushVOD Management System includes ABV Streamer, Push VOD Controller and MySQL. Different modules should install different software.

| Push VOD

The Main Functions

PushVOD system supports vehicles STBs and household STBs, The PushVOD Management System manages VOD streams input and edit, as well as the PUSH schedules and save into the database.

1. Collects and inputs all VOD streams and advertisement contents with categories.
2. Schedules the streams push plans and generates sections for STBs to schedule recording plans accordingly. The streams are to be pushed with fixed bitrates, and the push time durations are calculated against the stream sizes while generating the schedules. A time interval (i.e., 5 minutes) should be given between two pushed streams, so as to ensure the STBs recognize the different pushed streams correctly.
3. Schedules the advertisement push plans and generate sections for STBs to receive the advertisement contents. The contents include texts, images and video clips.
4. Saves all the pushed streams, advertisement contents data into server database in queue to be pushed by time triggers.
5. Pushes the video streams or advertisement contents according to the schedules. The video streams are to be pushed with CBR (constant bit-rate), the bit rates must be lower than the maximum bandwidths of the networks, and the time errors should be within $\pm 30s$.
6. Supports two push methods: IP multicast and streamer. ABV recommends to adopt IP multicast method so as to be easier managed and data analysis. The sequences of the push are Channel list sections.



DVB-T2 Client Products

STB

ABV DVB-T2 STB has various types, include zapper, advanced, combo and hybrid series, most of them adopt Ali, Mstar and Sunplus main chipsets with high performance but lower costs. Amlogic solution is used on the OTT series with DVB-T2 supported.

Neptune and Mercury are the two models of ABV DVB-T2 STB, the main difference of the two models is the latter one supports H.265 (HEVC) video compression standard. Mercury series also has a hybrid model with OTT and DVB-T2 by supporting H.265 (HEVC) and 4K.

iDTV

The integrated digital television (iDTV) set is a television set with one or several built in digital tuners, be it compliant with DVB-T2, DVB-S2, DVB-C, DMB-T/H, ATSC or ISDB standards. Most of them also allow reception of analogue signals (PAL, SECAM or NTSC). They do away with the need for a set-top box for converting those signals for reception on a television, but to integrate the same function hardware modules into the TV board so as to make the TV set as a combination of HD screen/monitor and STB, which now called iDTV.

CAM

A conditional access module (CAM) is an electronic device, usually incorporating a slot for a smart card, which equips an Integrated Digital Television (iDTV) or Set-top-Box with the appropriate hardware facility to view conditional access content that has been encrypted using a conditional access system. The primary purpose of the CAM is to derive control words, which are short-term decryption keys for the contents. CAMs are normally removable so that they can be replaced at any time.

STB

Neptune6580



DVB-T2, MPEG4/ H.264/ AVS HD Receiver
Support ABV CAS, Buzzer for EAS
Support Quad-band GSM/GPRS that works on frequencies
GSM850MHz, EGSM 900MHz, DCS 1800MHz and PCS 1900MHz
Favorite channel list management
Channel search (Automatic/manual)
Multi-Language (OSD & Menu)



Specification

Main system

Main Chipset: MSD7T03

Flash Memory: 8MBytes Flash

System Memory: 128MBytes

Demodulation

Receiver Standard: DVB-T (ETSI EN 300 744)

DVB-T2 (ETSI EN 302 755)

Demodulation: QPSK; 16/ 64/ 256QAM

Support M-PLP

Input System Rate: 1~ 40Mbaud

Video

Profile Level: MPEG2/ MPEG4/ AVC/ H.264

Display Resolution:

480i, 480p, 576i, 576p, 720i, 720p, 1080i, 1080p@60

Aspect Ratio: 4:3, 16:9, Pan& Scan

Audio

Audio Decoding: MPEG-1/ 2 Layer 1/ 2, MP3, AC-3 (Dolby Digital) (Optional), E-AC-3 (Dolby Digital Plus) (Optional); HE-AAC@V1/ V2

Audio Channel: Stereo / Left/ Right

Front Panel

RCU: 1 x Infra-Red receiver 38kHz

LED : 2 x LED (Red/ Green)

Display: 4 x 7-segment green display

Buttons: 3 x buttons (Standby, CH+/-)

Smart Card: 1 x SC slot ISO-7816 compliant

Rear Panel

RF Input: 1 x IEC Type Female

Loop Out: 1 x IEC Type Male

Analog Video: 1 x CVBS

Analog Audio: 2 x RCA stereo L/ R

HDMI: 1 x HDMI V1.3

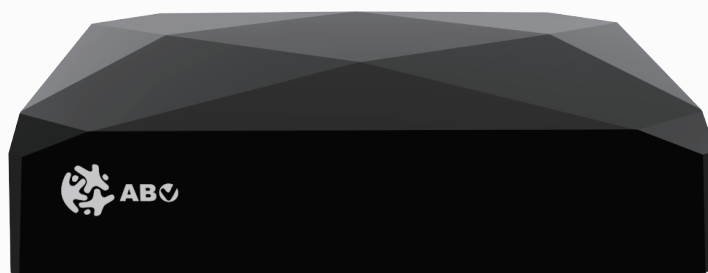
USB: 1 x USB 2.0 Type A

Buzzer: 1 x Buzzer build-in

Power: 1 x 12V/ 1.5A DC jack input

STB

Neptune6324



The STB is using Hisilicon 3796M V100 Quad-Core ARM cortex high performance A7 chipset with Android 4.4 OS platform. It's fully comply with the DVB-C standards, with H.265/HEVC decoding up to 4K*2K@30fps.

It features an advanced security engine integrating ABV CAS inside. The security engine protects the power on and boot processes, the OS kernel loading, the middleware launching, and the app/UI executions.



Specification

Main system

Main Chipset: Hisilicon 3796M V100 (Quad-Core)

Flash Memory: Up to 4GBytes eMMC

System Memory: 1GBytes DDR3 SDRAM

Demodulation

Receiver Standard: DVB-T (ETSI EN 300 744)
DVB-T2 (ETSI EN 302 755)

Demodulation: 16/ 32/ 64/ 128/ 256QAM

Symbol rate: 1 ~ 7.2Mbaud

Frequency: (VHF-H)170-230MHz; (UHF)470-862 MHz

RF Input Level: -75dBm ~ -10dBm

Video

Video Decoding: MPEG-2 MP@ML, MPEG-4, H.264, AVS/ AVS+, H.265/ HEVC, 4K x 2K@30 fps decoding

Aspect Ratio: 4:3, 16:9

Display Resolution:

480i, 480p, 576i, 576p, 720i, 720p, 1080i, 1080p

Audio

Audio Decoding: MPEG-1, MPEG-2 (Layer I/II), MP3 AC-3 (Dolby Digital Optional), AC-3+ (Dolby Digital Plus Optional)

Audio Mode: Mono/ Stereo / Left/ Right

Sampling rate: 32KHz/ 44.1 KHz/ 48KHz

Front & Side Panel

RCU: 1x Infra-Red receiver 38kHz

LED: 1x LED (Standby & Working)

Display: 4 x 7-segment display

Card Slot: micro SD slot

Rear Panel

RF Input: 1 x IEC Type Female

Loop Out: 1 x IEC Type Male

AV Out: 1 x CVBS, 1 x RCA Stereo L/ R

Digital Audio: 1x SPDIF

HDMI: Support V1.4

Ethernet: 1 x 10/100M Base-T RJ45

Power: 1x DC 12V DC jack input

STB

MIFI Box



ABV MIFI Box is a set-top box with MIFI function build-in, the box supports up to five WIFI-enable devices at one time, including PCs, Phones, Tablets and more. This product is a perfect solution for those family which cannot access the Internet. At the same time, we provide full security protection and all ABV middleware functions supports for the MIFI Box.

MIFI

&

STB

Specification

Main system

Main Chipset: Ali 3510L

Flash Memory: 8MBytes Serial FLASH

System Memory: 128MBytes DDR3

Demodulation:

Receiver Standard: DVB-T2 (ETSI EN 302 755)

Demodulation: QPSK; 16/ 64/ 256QAM

Frequency: (VHF-H)170-230MHz, (UHF)470-862 MHz

Video

Video Decoding: MPEG2 (MP@HL), MPEG4 AVC H.264 (MP@L4, HP@L4), AVS, AVS plus

Aspect Ratio: 4:3, 16:9

Display Resolution: 480i, 480p, 576i, 576p, 720i, 720p, 1080i, 1080p

Audio

Audio Decoding: MPEG1/ 2 Layer 1/ 2, AAC/ HE-AAC v1/v2, Dolby Digital (AC3) (optional), Dolby DigitalPlus (EAC3) (optional)

Audio Mode: Stereo/ Left/ Right

RightSampling rate: 32KHz/ 44.1 KHz/ 48KHz

MIFI Specifications

Chipset: MDM9207

Memory: 256MBytes DDR/ 512MBytes Flash

Communication System: TD-LTE/ LTE FDD/ TD-SCDMA/ WCDMA

Front & Top Panel

RCU: 1 x Infra-Red receiver 38kHz

LED: 6 x Green LED (Power, WIFI, 4G, Data, WAN, LOCK)

Smart Card: COB

Rear Panel

T2 Input: 1 x IEC 61169-24 Female (F Type)

AV Out: 1 x CVBS & 2 x stereo L/R (Ø3.5mm 4 contacts)

USB: 1 x USB 2.0 Type A; 1 x Micro USB

HDMI: 1 x HDMI

SIM Card: 1 x SIM Card Slot

Reset: 1 x Reset Button

Antenna: 2 x External MIMO Antenna

Power: 1 x 12V/ 1.5A DC jack input

Portable TV



The Portable TV is a mobile STB with a TFT screen integrated.

It supports video player via USB/TF ports,
and radio receiving and play out via speaker.

The antenna is embedded on the portable TV to
receive DVB signal and the radio waves.

Due to the easy setup and portable taking,
portable TV is popular for people who like traveling,
hiking and camping etc.



Specification

Main system

Main Chipset: MSD7T02

Flash Memory: 8MBytes Serial FLASH

System Memory: 64MBytes DDR3

Demodulation

Receiver Standard: DVB-T (ETSI EN 300 744)
DVB-T2 (ETSI EN 302 755)

Demodulation: QPSK; 16/ 64/ 256QAM

Frequency: (VHF-H)170-230MHz;
(UHF)470-862 MHz

RF Input Level: -75dBm ~ -10dBm

Video

Video Decoding: MPEG-1/ 2/ 4 ASP, DivX 3/ 4/ 5/ 6, XviD, H.264, AVS+, HD VC-1, RM/ RMVB, Real Video8/ 9/ 10, VP6

Display Resolution:

480i, 480p, 576i, 576p, 720i, 720p, 1080i, 1080p

Aspect Ratio: 4:3, 16:9

Audio

Audio Decoding: MPEG 1/ 2/ 2.5, Audio Layer 1/ 2/ 3, WMA Version 4, 4.1, 7, 8, 9, WMA Pro, PCM, Vorbis, Flac, ALAC, APE, AAC-LC, AAC-HE, AC-3, DTS

Format: *.mp3, *.wma, *.wav, *.ogg, *.flac, *.mka

Front & Side Panel

RF Input: 1x IEC 61169-24 Female

Button: 7 Buttons

TF: 1x TF card Slot

AV OUT: x1

AV IN: x1

HDMI: x1 HDMI 1.3

Power: DC IN and Build-in 2200mAh Powerbank

MUNE

ENTER

SOURCE

Car Box



Car box is the device to be set up inside the buses, subways, taxis and cars to receive the DVB-T2 signals via the antennas installed outside but onside them, and then decode the streams and output the audio/video onto the TV screens. Passengers can watch live TVs or VOD programs when they take these vehicles.



Specification

Main system

Main Chipset: MSD7S735B

Flash Memory: 16MBytes, SPI NOR Flash

System Memory: 256MBytes DDR3 embedded

OS: eCOS

Demodulation

Receiver Standard: DVB-T (ETSI EN 300 744)

DVB-T2 (ETSI EN 302 755)

Demodulation: QPSK; 16/ 64/ 256QAM

Frequency: (VHF-H)170-230MHz

(UHF)470-862 MHz

RF Input Level: -75dBm ~ -10dBm

Video

Video Decoding: MPEG-2 MP@ML, MPEG-4, H.264,

AVS/ AVS+, H.265

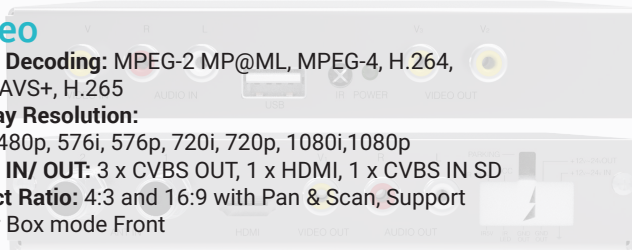
Display Resolution:

480i, 480p, 576i, 576p, 720i, 720p, 1080i, 1080p

Video IN/ OUT: 3 x CVBS OUT, 1 x HDMI, 1 x CVBS IN SD

Aspect Ratio: 4:3 and 16:9 with Pan & Scan, Support

Letter Box mode Front



Audio

Audio Decoding: MPEG Layer I, II & MP3, AAC+, Dolby

Front Panel

AV IN: 3 x RCA (Yellow/ White/ Red)

USB: 1 x USB 2.0

IR Remote Sensor: 38KHz

Video OUT: 2 x RCA (Yellow)

Real Panel

Antenna IN1: F-Type Female

Antenna IN2: F-Type Female

AV out: 3 x RCA (Yellow/ White/ Red)

HDMI: 1 x HDMI 1.3

IR Extender: 4-PIN Connector w/ lock (5min pitch)

Power Socket: 6-PIN Connector w/ lock (5min pitch)

Power

IN12V~24V, 12V~24V Loop OUT, Parking, ACC, GND, Earth

| CTV 600



The iDTV is a television set with one or several built in digital tuners. Most of them also allow reception of analogue signals (PAL, SECAM or NTSC). They do away with the need for a set-top box for converting those signals for reception on a television, but to integrate the same function hardware modules into the TV board so as to make the TV set as a combination of HD screen/monitor and STB, which now called iDTV.



Specification

Main system

Main Chipset: Ali 3510L

Flash Memory: 8MBytes Serial Flash

System Memory: 128MBytes DDR

Panel

Description: HD DLED (23.6" or 32")

Aspect ratio: 16:9

Resolution: 1366*768

Brightness: 200cd/㎡

Maximum colors: 16.7M

Demodulation

Receiver Standard: DVB-T (ETSI EN 300 744)
DVB-T2 (ETSI EN 302 755)

Demodulation: QPSK; 16/ 64/ 256QAM

Frequency: (VHF-H)170-230MHz;
(UHF)470-862 MHz

RF Input Level: -75dBm ~ -10dBm

Video

Video Decoding: MPEG-2 MP@ML, MPEG-4,
H.264, AVS

Display Resolution:

480i, 480p, 576i, 576p, 720i, 720p, 1080i, 1080p

Audio

Audio Decoding: MPEG-1/2 Layer I/II/III,
MPEG-2 AAC

Sampling rate: 32KHz/ 44.1 KHz/ 48KHz

Audio Mode: Mono/ Stereo/ Left/ Right

Front & Side Panel

RCU: 1 x Infra-Red receiver 38kHz

Buttons: 7x buttons on the Side Panel (Power /
Source/ Menu/ CH+/ CH-/ Vol+/ Vol-)

Indicator: 1 x Tricolor LED

Display: HD DLED (23.6" or 32")

Audio: 2 x 3W for 23.6" (Max, Internal)
2 x 10W for 32" (Max, Internal)

Smart Card: COB

Rear Panel

RF Input: 1 x IEC 61169-24 F-Type Female

YUV In: 1 x YPbPr (Green/ Blue/ Red)

RCA In: 1 x RCA (1xCVBS+2x stereoL/ R)

VGA: 1 x VGA (15pin D-sub)

Earphone output: 1 x Ø3.5mm stereo 3 contacts

PC audio in: 1 x Ø3.5mm stereo 3 contacts

HDMI in: 1x HDMI input

TF: 1 x TF card Slot

USB: 2 x USB 2.0 Type A

Ethernet: 1 x RJ45

Power: 1 x AC input 100~240V, 50-60Hz,
Cable length 1.0m EU plug

Operational

IDTV size: W566.7*H383.6*D176 (23.6")
W750*H510*D200MM (32")

Package: Gray Carton Box with black printing
Serialization procedure: According to STBID
requirements Separate Serial Number in digits
and bar code

Operating: 0°C to 40°C

Storage temp.: -10°C to 60°C

Relative Humidity 95% (max), non-condensin

Mobile Dongle



Our mobile dongle can help those people to watch TV/movies outside home by using the mobile devices such like phones and tablets. This product is most suitable for those people who like traveling, hiking, camping and all those activities with the requirements to watch TV or live shows without using the traditional STB and TV screens. It's easy to set up and quick to search DVB-T2 signal.

Tuner

Modulation mod: DVB-T2
Frequency: (VHF& UHF)42-860MHz;
RF Input Level: -86dBm ~ -10dBm

Connections

RF IN: Mcx Female
USB 2.0: 1 Micro USB Female;
1 Micro USB Male

Demodulation

Receiver Standard: DVB-T2 (ETSI EN 302 755)
Demodulation: QPSK; 16/ 64/ 256QAM

Power

Input: 5V 300mA (Max) through USB

CAM

ABV CAM is one of the user-friendly consumer devices for accessing digital broadcast content in the market. The subscriber can easily start watching scrambled TV content by inserting the CAM in the Common Interface (CI) slot on the back of the TV set along with the ABV smart card.

There is no need for any additional remote control, Set-Top-Box or extra cabling. The CAM is very suitable for a 2nd or 3rd TV set, as well as the main TV set. The low power consumption of the CAM ensures a very eco-friendly option to most Set-Top-Boxes.



All of the different CAMs are seamlessly integrated and compatible with the various editions of ABV CAS, which is a highly flexible and scalable content protection system for DVB-T2 network. The CAM performs decoding of the ABV encrypted media content delivered to any TV set with a digital T2 tuner.



www.abvtc.com

Singapore (HQ)

☎ +65 - 6592 - 0051
✉ singapore@abvtc.com
📍 #29 - 71 WCEGA Tower,
21 Bukit Batok Crescent,
Singapore, 658065

India

☎ +91 - 11 - 4352 - 2833
✉ india@abvtc.com
📍 K1, Jungpura,
Birbal Road Comercial Complex,
New Delhi, 110014

China

☎ +86 - 10 - 6297 - 3686
✉ china@abvtc.com
📍 Rm. 1001, Tower C,
Jin Yu Jia Hua Plaza,
No.9 Shangdi 3rd Street,
Beijing, 100085

Dubai

☎ +97 - 155 - 207 - 7559
✉ dubai@abvtc.com
📍 810 Al Ain Towers
Media City,
Dubai