

Motorola IP STB Portfolio Review



Leading the Market in IPTV Solutions

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IPTV – Continued Market Growth Despite Financial Downturn



Western European IPTV Subscribers:

Top 3 Countries by IPTV Subscribers (000)

2008 Rank	Country	2008	2012	CAGR '08-'12
1	France	6,123	9,860	12.6%
2	Spain	670	998	10.5%
3	Germany	515	1,651	33.8%
Total		7,308	12,509	14.4%
Regional Total		9,927	17,819	15.7%

Top 3 by Share of Total Regional IPTV Market

2008 Rank	Country	2008	2012	CAGR '08-'12
1	France	61.7%	55.3%	-2.7%
2	Spain	6.7%	5.6%	-4.5%
3	Germany	5.2%	9.3%	15.6%
Total Top 3		73.6%	70.2%	-1.2%

Top 3 by IPTV Share of Multichannel Households

2008 Rank	Country	2008	2012	CAGR '08-'12
1	France	40.2%	50.2%	2.9%
2	Spain	16.1%	19.4%	4.7%
3	Belgium	10.9%	16.3%	10.5%

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Eastern European IPTV Subscribers:

Top 3 Countries by IPTV Subscribers (000)

2008 Rank	Country	2008	2012	CAGR '08-'12
1	Russia	203	724	37.4%
2	Czech Republic	127	249	18.4%
3	Estonia	83	118	9.1%
Total		413	1,091	27.5%
Regional Total		679	2,514	38.7%

Top 3 by Share of Total Regional IPTV Market

2008 Rank	Country	2008	2012	CAGR '08-'12
1	Russia	29.9%	28.8%	-0.9%
2	Czech Republic	18.6%	9.9%	-14.6%
3	Estonia	12.2%	4.7%	-21.4%
Total Top 3		60.7%	43.4%	-8.1%

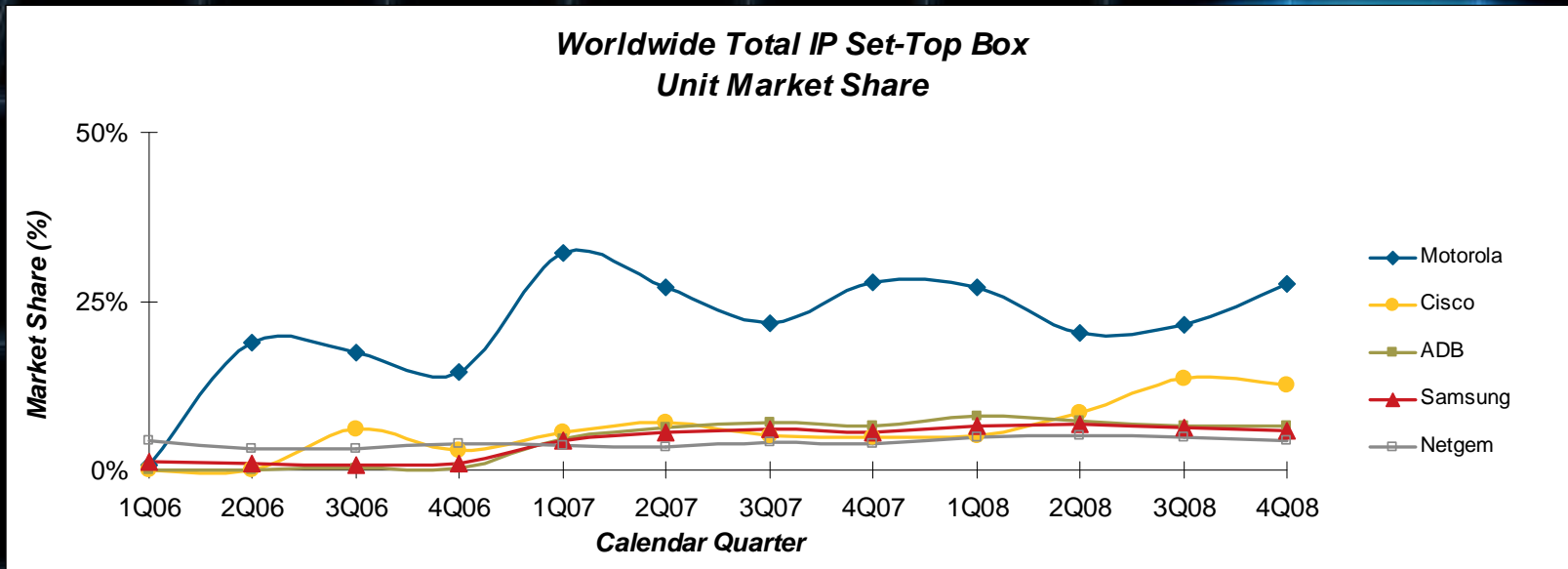
Top 3 by IPTV Share of Multichannel Households

2008 Rank	Country	2008	2012	CAGR '08-'12
1	Estonia	19.2%	23.7%	5.5%
2	Lithuania	8.6%	15.0%	14.9%
3	Czech Republic	6.5%	10.4%	12.3%

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Global Growth Expected from 21 Million Subs in 2008 to 53,7 in 2012

Motorola is a Market Leader in Digital Set Top Boxes



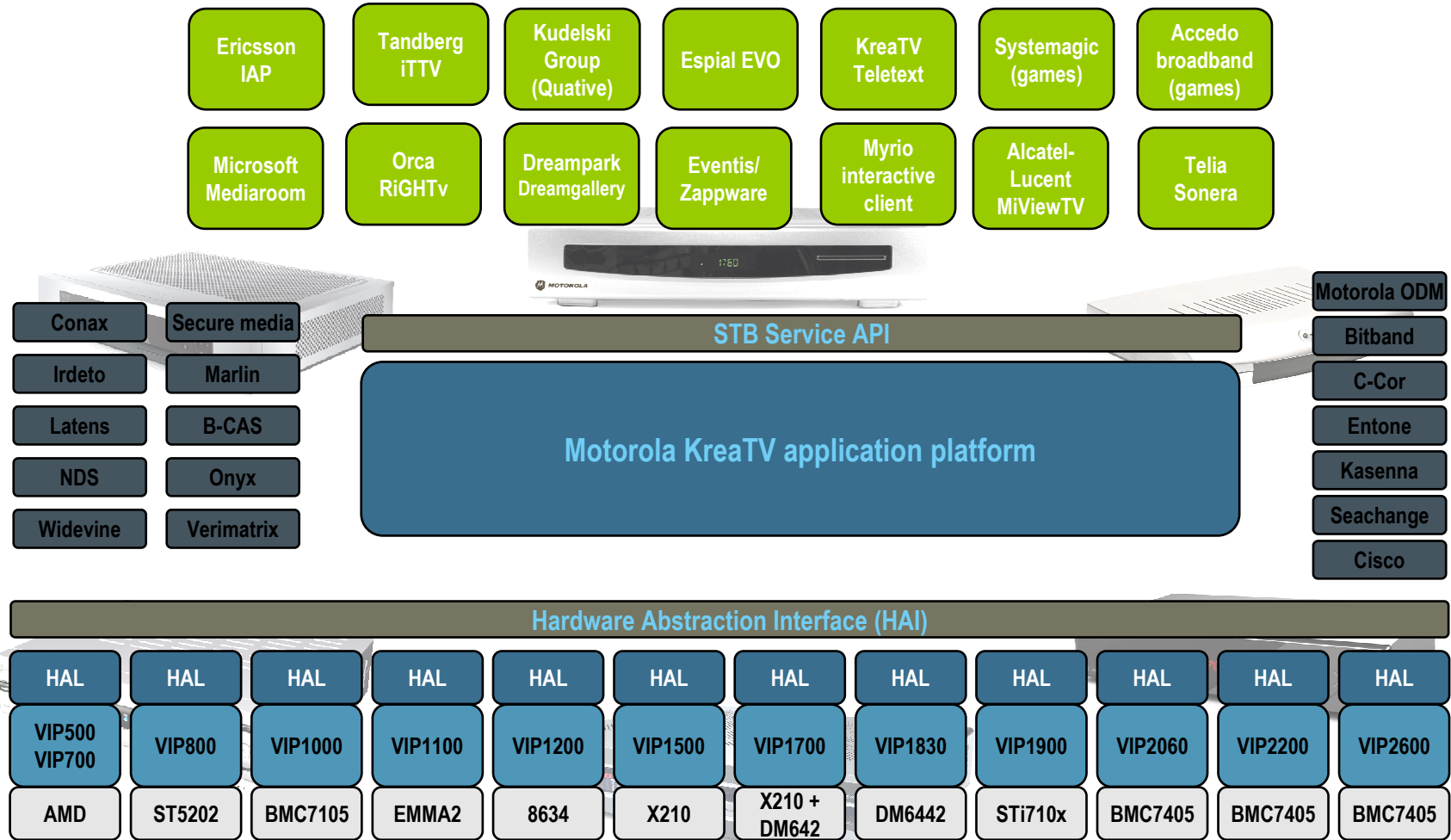
#1 Digital cable set-tops

+ 80M units shipped

#1 IPTV set-tops

+ 6M units shipped

Motorola = More than just Settops



KreaTV™ Software Application Platform



Multi-application environment for advanced IPTV services

Functionality and features include multicast TV, VOD, DVR, home networking, and video telephony

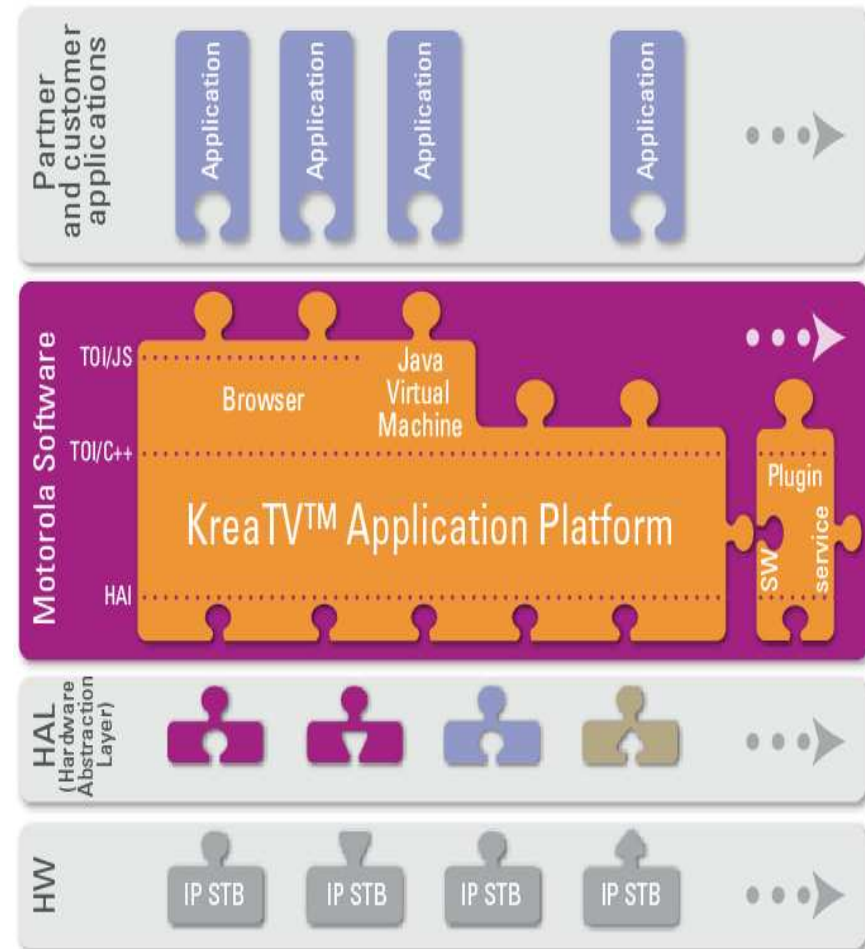
Enables several STB models based on different chipsets in the same IPTV solution

Multiple development environments (HTML/Javascript, C++, Java)

Open API for third party applications

Pre-integrated with leading middleware applications, video servers and security solutions

Dynamic download of applications in runtime without reboot



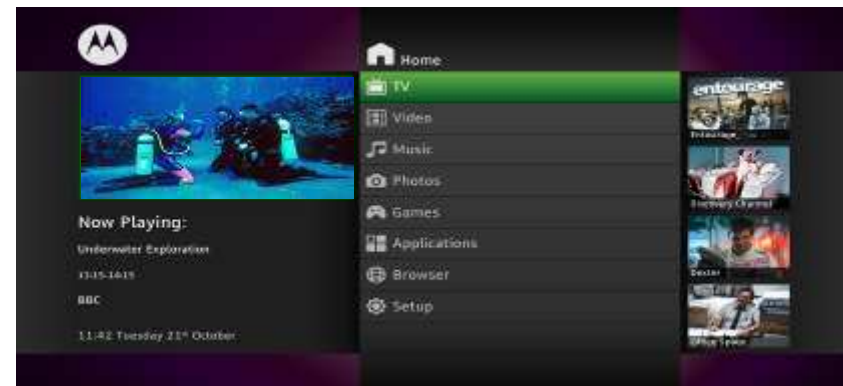
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New For 2009/10 KreaTV and Next-Gen Chipsets = Advanced UI capabilities and services!



- HD Graphics capabilities
- Improved browser and UI
- Improved Performance
- DLNA
- SVG
- WebKit
- TR-69 Extensions
- PIP
- Power Code of Conduct



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Motorola IPTV Set-top Matrix



	VIP100x	VIP12nn	VIP1616	VIP1830	VIP1900-9	VIP19x3	VIP2060	VIP22n2	VIP26n2
SDTV only									
HDTV	*	*	*	*	*	*	*	*	*
Hybrid			*		*	*	*	*	*
DVR		*	*		*	*	*	*	*
DVD				*					
Encoding				*			*		
Transcoding				*			*		
802.11n				*				*	*
HPNA				*				*	
E-Sata	*							*	*
KreaTV	*			*	*	*	*	TBD	
MS Mediaroom	*	*	*					*	*

Standard TV
High quality broadband TV Services
– Multiapplication

DVB-T/IP hybrid
Seamless integration of DVB-T/S/C
content with IP services

HDTV
High definition television for a superior TV
viewing experience



Open Systems Set Top Boxes



Title of Presentation April 21, 2010

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New for 2009 – 19x3 Series Better Performance!



Performance

- CPU speed 266MHz -> 450MHz
- DMIPS 450 -> 800+

Memory Options

- DDR1 -> DDR2
- 128 + 32 -> 256 or 512MB
- 64 MB application flash on all models

Full Power Code of Conduct compliance

- Target < 1W in standby, software upgradeable
- Low power consumption as standard, below 6W for VIP1903 and below 12W for VIP1963T with both HDD and two tuners active

Faster boot time

- Target < 30 s

Hybrids for DVB-T and DVB-C

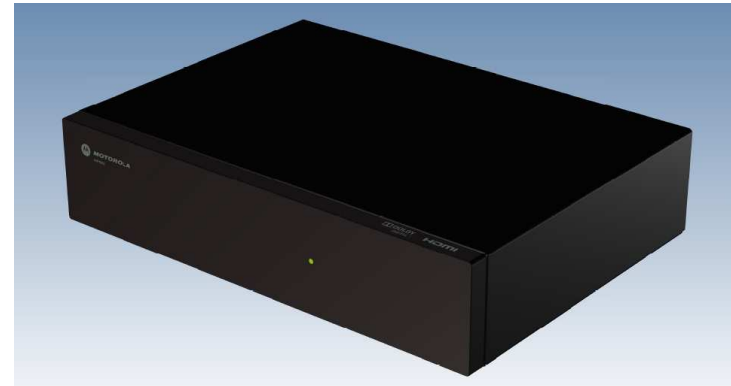
Fan-less DVR models also available

Smaller casing for DVR models

- Less weight = lower transportation costs

Supported from KreaTV 3.8 software release

New faster browser	3x faster
New faster chipset	2x faster
Shorter boot-time	3x faster
Power consumption in standby	9x less
= A new improved user experience!	



Standard Front Panel



Front Panel with Display and Buttons

Open Systems Platform 19xx Series



Video

MPEG1, MPEG2, MPEG4 AVC, VC-1

Audio

MPEG1 L1,L2, PCM, DD pass through, DD Down mix, AAC HE decode, LC-AAC decode, MP3

Optional Single and Dual DVB-T tuner

Optional DVR and DVR Sizes

Optional DVBC Tuner

Standard KreaTV software platform support

Intagrated with multiple Middleware

Intagrated with multiple CA



Memory / CPU Performance	
Main memory	128 (256) MB
Video RAM	32 (64) MB
Boot flash	4 MB Secure
Flash	32 (64) MB
HDD (optional)	160 (250, 320, 500) GB
DTT Tuners (optional)	1 or 2
CPU	450 MIPS
Software	
Operating system	Linux
Software platform	KreaTV
Front Panel Interfaces	
Status Led's	2 or 3
Display	4 char led (Optional)
Remote Control	IR
Rear Panel Interfaces	
Ethernet	1
RF	EIC Male & female
Composite Video	In SCART
S-Video	In SCART
SCART	2 TV and AUX
HDMI v 1.2a	1
Analog audio	1
SPDIF	2 (coax and optical)
USB	2

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Microsoft Mediaroom Set Top Boxes



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New for 2009 – 22x2 Series Better Performance!



- Increased processing power for advanced applications
 - Dual 400Mhz Processors
 - Up to 512MB DRAM and 128MB Flash
- Improved responsiveness for 3rd Party Applications
Ex: Ability to do targeted advertising from DVR
- Disk Drive storage flexibility with optional e-SATA
- Various stuffing options: VFD, DVB-T, 802.11n, Power Management, PoF
- Fan-Less DVR Models
 - Optional 250GB, 320GB, 500GB, 750GB HDD
- Hybrid DVB-T Model Available
- Smaller Casing
- Mediaroom Certification in Q4 2009, Volume Shipments in Q1 2010



Front Panel with Mechanical Buttons



Front Panel with Cap Sense Buttons

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VIP22n2E

Single TV HD/SD + DVR



Key Enhancements:

- Increase processing power: Dual 400Mhz MIPS
- Supports up to 512MB DRAM and 128MB Flash
- Flexible Home Networking: Ethernet, HPNA and or 802.11n (optional)

Various Stuffing Options:

- Increase hard disk drive storage flexibility with optional e-SATA
- Optional third USB2.0 (Two on the back and one in the front)
- Optional 250GB, 320GB, 500GB, 750GB HDD
- Single DVB-T tuner (option)
- Dual Tuner Version Available VIP2662E

Memory /CPU Performance	
DRAM	256 MB
Flash	Option
CPU (MIPS)	2 x 400+
Front Panel Interfaces	
Power	✓
Status LEDs	✓ (3)
Control Buttons	✓ (7)
Remote Control	IR
USB 2.0	✓
Rear Panel Interfaces	
Ethernet	✓
USB 2.0	✓ (optional 2)
Composite Video	✓ (2)
L/R Audio	✓ (2)
S-Video	✓
e-SATA	Optional
802.11n	Optional (phase II)
Optical SPDIF	✓
DVB-T tuner (single)	Optional
SCART (or YPbPr)	✓
HDMI	✓
Integrated HDD	Optional
Power Supply	External

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New Hardware Introduction!



VIP100x

- Cost optimized STB available for Mediaroom and Open Systems Platforms
- Small casing
- USB Optional
- No Smartcard



Memory/CPU Performance	
DRAM	256 (512) MB
Flash	32 (64,128) MB
CPU (MIPS)	Dual 400Mhz
Front Panel Interfaces	
Power	✓
Status LED	✓
Remote Control	IR
Rear Panel Interfaces	
Ethernet	✓
USB 2.0	✓ (option)
Composite Video	✓ (option)
L/R Audio	✓ (option)
SCART	✓ (option)
Coax SPDIF	✓ (option)
HDMI	✓
Power Supply	External
eSATA	✓ (option)

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Motorola Value-Add

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Motorola Value & Competitive Advantage



- KreaTV Software Application
- Selection of Remote Controls, Keyboard, Cables and other Accessories
- Strong Supply Chain with European Manufacturing and distribution
- Strong Quality
- Brand Recognition
- Customization Capabilities
- Local Support and Presence



Motorola is not the low “price leader” however we have built number one market share on our ability and our partner’s ability to sell value.

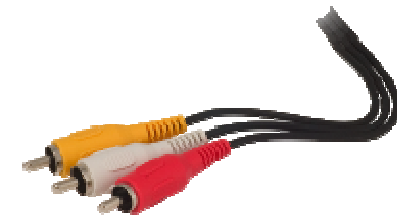
Motorola customization options*



- Logo in STB front
- Color of STB casing
- Print/custom manual
- Print/custom packaging
- Print/custom remote
- Logo on remote
- Cables (length, colour)



Accessories, remote control, manual can be added



*Subject to Volume and other commitments

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The Motorola difference

**Extensive Video deployment experience
= Expertise**

**Broad Relationship with Many Partners
= Lower Risk**

Broad portfolio of set-top products = Choice

#1 Global Market Share = Scale

**Innovation in Home Networking & Advanced
Applications = Vision**

**Global Player with Strong European Team
= Local Support**



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