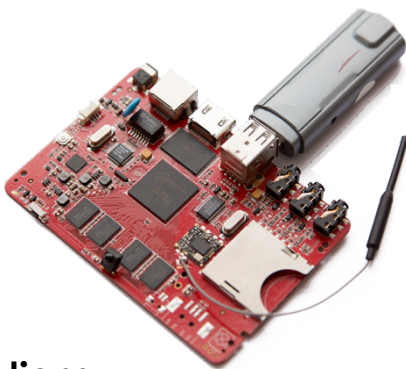


MITOS: Media Interactive Tv platform for Open Services

MITOS is an advanced Set-top Box to provide media interactive services through the TV. It is based on Linux and currently embedded in a Hackberry 1.2 GHz ARM Allwinner A10 chipset. MITOS enables the full management of the devices through its services:

- TV tuner management: Channel up/down, EPG, etc.
- Dynamic multi-source composition: Overlapped information over the TV
- Full customisation of the user interface: modify the size (width, height), position (x, y) and z-order of each element: TV content, browser, overlapped information (EPG, etc.)
- Remote management of the services: Customisable local intelligence remotely managed and controlled (e.g. through a standard remote control or through an external agent at home or at Internet using Web Services or WebSockets)
- Communication with other devices at home: smartphones or tablets, healthcare equipment, other media devices (e.g. through local network communications such as DLNA / UPnP)



Applications

- Vertical business approaches for service provision
- Elder people inclusion, accessibility through service and device integration
- Integration of public services (e.g. healthcare, social assistance, education, etc.)

Use case

MITOS is integrated with medical devices at home (e.g. a scale). It has some tasks programmed in the Internal Service Manager, fully customisable remotely by a medical assistance centre. While the user is watching TV, an overlapped message asks the user to measure the weight.



The user accepts through the remote control and MITOS seamlessly configures the scale. The TV set provides instructions for the user and when it is finished shows the value in the TV and sends the information to the medical assistance centre.



Modules

Module	Features	OS & Chipset
TV tuner (DVB-T,S,C)	<ul style="list-style-type: none"> Local and remote tuner control HD and SD compatibility EPG Automatic channel scanning 	<p>Linux based</p> <p>Embedded in Hackberry1.2GHz ARM Allwinner A10</p>
Remote Control	<ul style="list-style-type: none"> Compatible with IR or RF remote controls Adaptable to any commercial remote control Functionalities can be controlled through IP communications 	
Web Browser	<ul style="list-style-type: none"> Based on Webkit HTML5/CSS3 compatible HbbTV compatible 	
User Interface	<ul style="list-style-type: none"> Fully customizable Rich combination of media and graphical elements (including the tuner and browser elements) Remote UIs are allowed 	
Communication layer	<ul style="list-style-type: none"> UPnP for communication with other devices Web Services to communicate with external agents 	
Internal service manager	<ul style="list-style-type: none"> Tasks can be scheduled and managed by the MITOS device using an Internal Service Manager Any functionality of MITOS can be managed by this Internal Service Manager 	
Hardware	<ul style="list-style-type: none"> HDMI output 2xUSB 3.0 Ethernet RJ45 Infrared receiver 	

