

MWB-1300
Wireless Video Extender Kit
Product Description

Carrier Grade, WiFi System for multi-stream HD IPTV Home Distribution

The MWB-1300 video extender set is a carrier-grade WiFi based HD video system designed to reliably distribute multiple High Definition IP video streams (IPTV) throughout the home. This simple, robust multimedia home networking solution provides users with a high quality viewing experience. Consisting of the MWB-1305 access point and multiple MWB-1025 client adapters, this cost effective WiFi solution eliminates the cost and hassle of installing new wires.

The MWB-1300 enables reliable and robust connectivity of HD and SD IPTV streams from Ethernet-equipped broadband gateway or DVR to multiple set top boxes. Self-installable and fully interoperable with common IPTV servers, middleware and set top boxes, MWB-1300 allows operators to accelerate deployment schedules and reduce opex by eliminating expensive truck rolls.



Figure 1 MWB-1300 Kit

Enhancing the HD Experience

- Wire-Like video experience
- Whole home coverage without dead spots
- Superior interference immunity and trouble-free co-existence with neighboring systems
- Supports up to four client devices
- Easily self installed with plug & play operation
- Unique “Base station” approach enables MWB-1305 AP to support migration to integrated WiFi set top boxes.

Carrier-Grade Feature Set

- Real time Implicit Transmit Beam Forming and smart antenna diversity in the MWB-1305 AP.
- Real time wireless channel tracking for optimal rate selection and power control.
- Advanced interference detection and automatic channel scanning and hopping
- IGMP snooping, Multicast to Unicast translation and WDS support for seamless IPTV network integration
- WPS for simple setup and security configuration
- Complies with EU CoC energy consumption for broadband equipment 2009/2010

Description of Operation

The MWB-1305 device is a WiFi access point designed to stream HD video reliably throughout the house.

The MWB-1305 achieves the above by using a 802.11a baseband chip with a dual RF transceiver that is able to stream the same video packets simultaneously by coherently summing their transmit singles thus gaining an additional 3db. In addition transmit antenna diversity is used to further increase the robustness of the system (See "Printed Antenna Spec – V3.doc).

The above techniques allow the MWB-1305 AP to send video packet with high modulations to any location in the house. The supported modulations are: 6 ,9 ,12,18,24,36 ,48 and 54 Mbps.

The MWB-1305 usually resides next to the home gateway device, connected to one of its LAN ports using an Ethernet cable and streams video to multiple MWS-1000 client devices.

The MWS-1000 device is a WiFi client designed to receive the video packets sent by the MWB-1305.

The MWS-1000 is using a 802.11a baseband chip with a single RF transceiver.

The MWS-1000 device is acting mainly as a receiver and its transmissions are limited to 802.11 and TCP acknowledgements and to 802.11 management frames.

The MWS-1000 supports all 802.11a modulations (6Mbps – 54Mbps).

The MWS-1305 usually resides next to the IP set top box and connects to its LAN port using an Ethernet cable.

Block diagrams

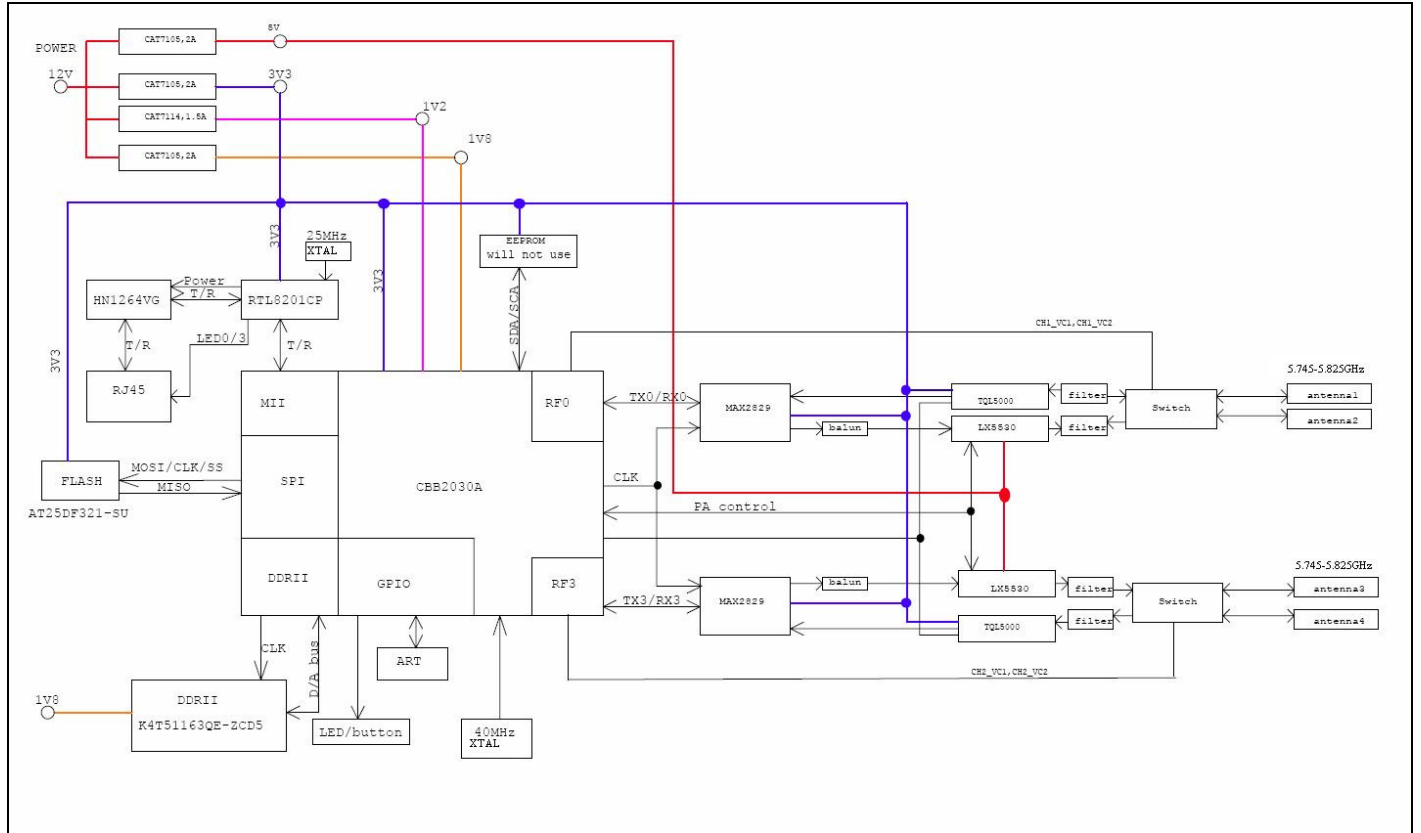


Figure 2 - MWB-1305

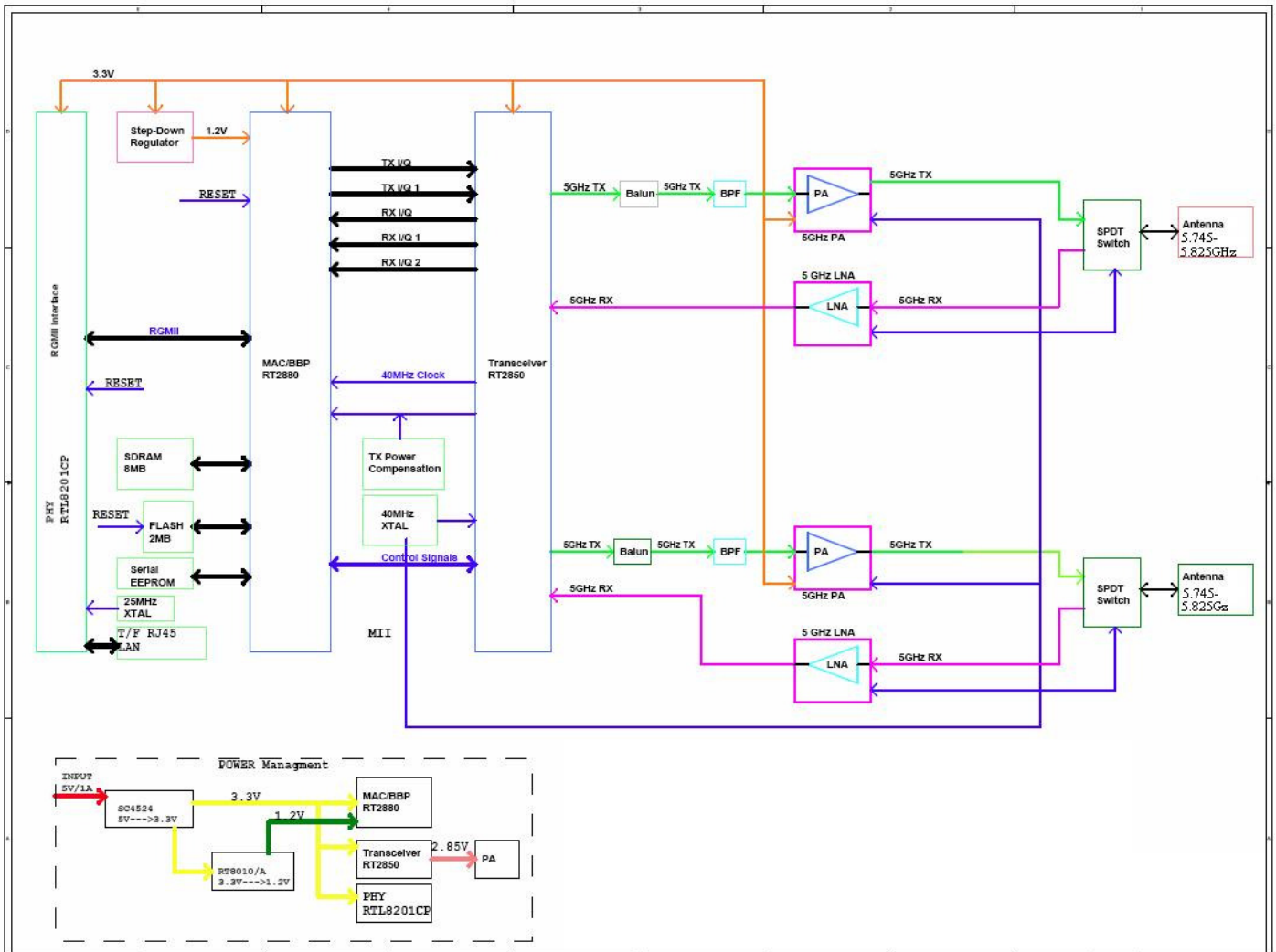


Figure 3 - MWS-1000