ISP100601 WHDI Receive Module

Features

- Video reception on Large Screen TV, display monitor or Projector
- WHDI Receiver: uncompressed Full-HD video quality. WHDI 1.0 compliance, including HDCP 2.0
- 40 x 35 x 4.5 mm
- Up to Full HD 1080p 60Hz, UXGA video resolution
- Audio support: S/PDIF + 4 x I2S Audio 192 kHz 24 bit
- Uses 5GHz ISM band, MIMO configuration
- “Deep Color support:”, Up to 12 bits per colour: 36 bit RGB or YCrCb
- Strong 256-bit AES encryption
- Less than 1mSec latency between source and sink
- DFS compliance (enabling more RF channels)
- Frame buffer available for best quality (still pictures & video)

Description

The ISP100601 module is based on AMIMON AMN123 Robin Receiver reference design. The Robin reference board is a WHDI receiver board based on Maxim’s RFICs Max2851 and Max2852, and AMN2220 baseband IC and all serial and AV interfaces. Parts of the RF front end are integrated within the structure of the module to enable size optimization.

AMN123 is a MIMO receiver specifically designed for WHDI™ applications using OFDM modulation. This solution allows reception of high quality audio and video, without compression, over a distance of 15 to 50 m depending on the environment. Figure 1 below shows the functional block of the module.
Functional Block

Figure 1: Functional of the ISP100601

Mechanical Drawing