

AL-D110 Decoder IP

JPEG, H.264/AVC and H.265/HEVC

- Unique scalable architecture
- Support for video resolutions up to 8K
- Hardwired architecture for minimum gate count and optimized power consumption
- Low memory bandwidth
- Fast and easy SoC integration
- Flexible, user configurable control software
- Designed for integration into smartphones, tablets, set-top boxes, camera SoCs, digital TVs, etc.



ALLEGRO
Digital Video Technology

AL-D110 Decoder IP

JPEG, H.264/AVC AND H.265/HEVC UP TO 8K RESOLUTION

VIDEO IP

Allegro DVT's AL-D110 is a multi-format, real-time hardware decoder IP core that includes support for JPEG, H.264/AVC and H.265/HEVC standards. Its unique scalable architecture offers a highly configurable and flexible design, meeting the requirements for small area and high performance of applications such as:

- Smartphones, tablets
- Camera SoCs
- Automotive
- Set-Top Boxes, digital TV
- Wireless displays
- VR/AR headsets

Key advantages

- Scalable architecture supporting any video resolution up to UHD/8K
- Hardware based implementation for very low gate counts and power consumption
- Low memory bandwidth requirements
- Fast and easy integration within a wide range of System-On-Chip (SoC) designs
- Standalone entity, requiring minimum support from SoC embedded CPU
- Tested using Allegro DVT's "industry standard" certification streams

Features

Profile/Level

H.264/AVC Constrained Baseline, Main, High, High 10 and High 4:2:2 profiles
H.265/HEVC Main, Main 10 and Main 4:2:2 10 profiles
JPEG baseline

Error resilience

Support of Error resilience and Error concealment

Interface

AMBA APB interface for control registers programming
AMBA AXI interface for data access

Deliverables

- RTL source code
- C control software
- Bit accurate reference model
- Documentation



Allegro DVT is a leading provider of H.264/AVC, H.265/HEVC, AVS2, VP9 and AV1 solutions, including industry standard compliance test suites, H.264/AVC, H.265/HEVC and VP9 encoder, codec and decoder hardware (RTL) IPs. Allegro DVT products have been chosen by more than 100 major IC providers, OEMs and broadcasters.

For more information, visit <http://www.allegrodvt.com> or contact info@allegrodvt.com



15, avenue du Granier
38240 Meylan – FRANCE

info@allegrodvt.com
www.allegrodvt.com

+33 4 76 42 66 85