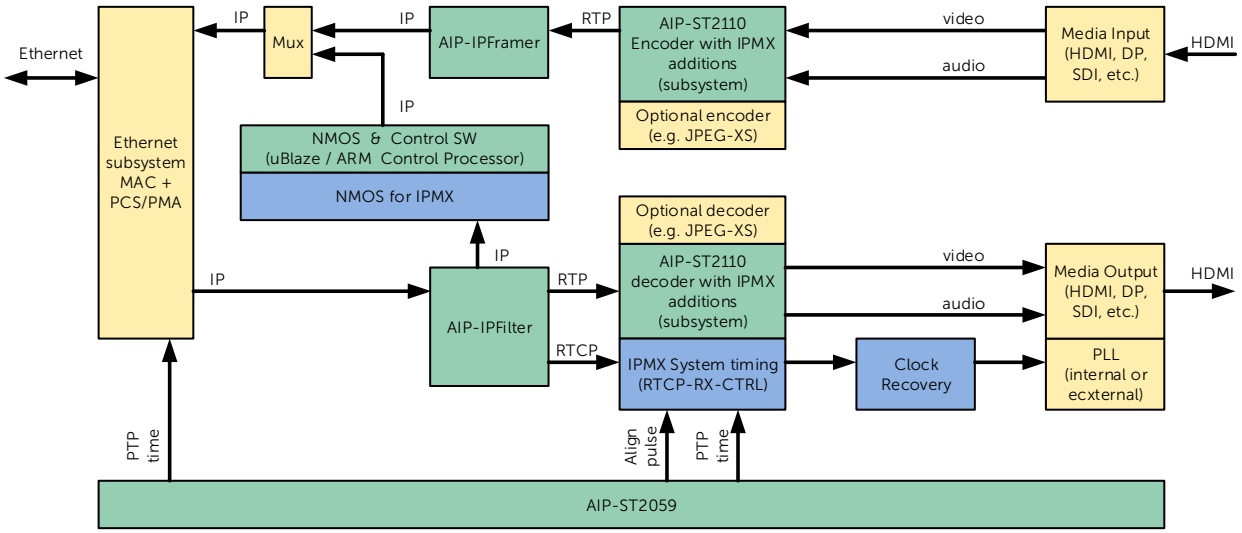
Specialized FPGA and SoC
Design Services

# IPMX-FPGA IP cores

## IPMX-Enable your Products Quickly and Easily




Adeas and Nextera Video offer industry leading FPGA IP cores for ST 2110, ST 2059, NMOS, and now IPMX! Our cores have been broadly deployed and proven worldwide. We look forward to sharing our expertise to help you IPMX-enable your product line.

## AV over IP Cores

- ST 2110 Encoder and Decoder
- ST 2059 PTP Timing
- IP Framer and Filter
- NMOS IS-04, IS-05, IS-08, IS-09, and IS-10
- NMOS for IPMX
- IPMX System Timing (RTCP)
- Clock Recovery

## Key Features

- TR-08 Compliant (requires JPEG-XS Core)
- Included IPMX support for:
  - TR-10-1 (System Timing)
  - TR-10-2 (Uncompressed Video)
  - TR-10-3 (Audio)
  - TR-10-4 (Ancillary)
  - TR-10-8 (NMOS)
  - TR-10-11 (CBR Compressed Video)
  - TR-10-12 (AES3 Audio)
  - Networks with and without a Common Clock Reference
- Fully integrated and modular solution
- ST 2110 and NMOS base cores have been interop tested and proven in Broadcast TV
  see: www.jt-nm.org/jt-nm-tested

## Video Specifications

- Uncompressed & Compressed (JPEG-XS, etc.)
- Format and Frame Rate Independent
  - Any Resolution: Video/Computer up to 8K+
  - Any Network: 1G, 2.5G, 5G, 10G, 25G+
  - Any Color Space: RGB or YCbCr (w/ Key)
  - Any Color Sampling: 4:4:4, 4:2:2, or 4:2:0
  - Any Bit Depth: 8, 10, 12, or 16 bit

## Audio Specifications

- Sample Rate Independent
- Programmable packet time
- Supports L16, L20, L24, AES3

## Deliverables

- Delivered as RTL IP Cores, including all PetaLinux
- software drivers, daemons, system control software,
- and a Web GUI, along with:
  - Product Guides
  - Application Note
  - HDMI I/O Demo Design for:
  - Zynq UltraScale+ ZCU106 (1G or 10G)

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