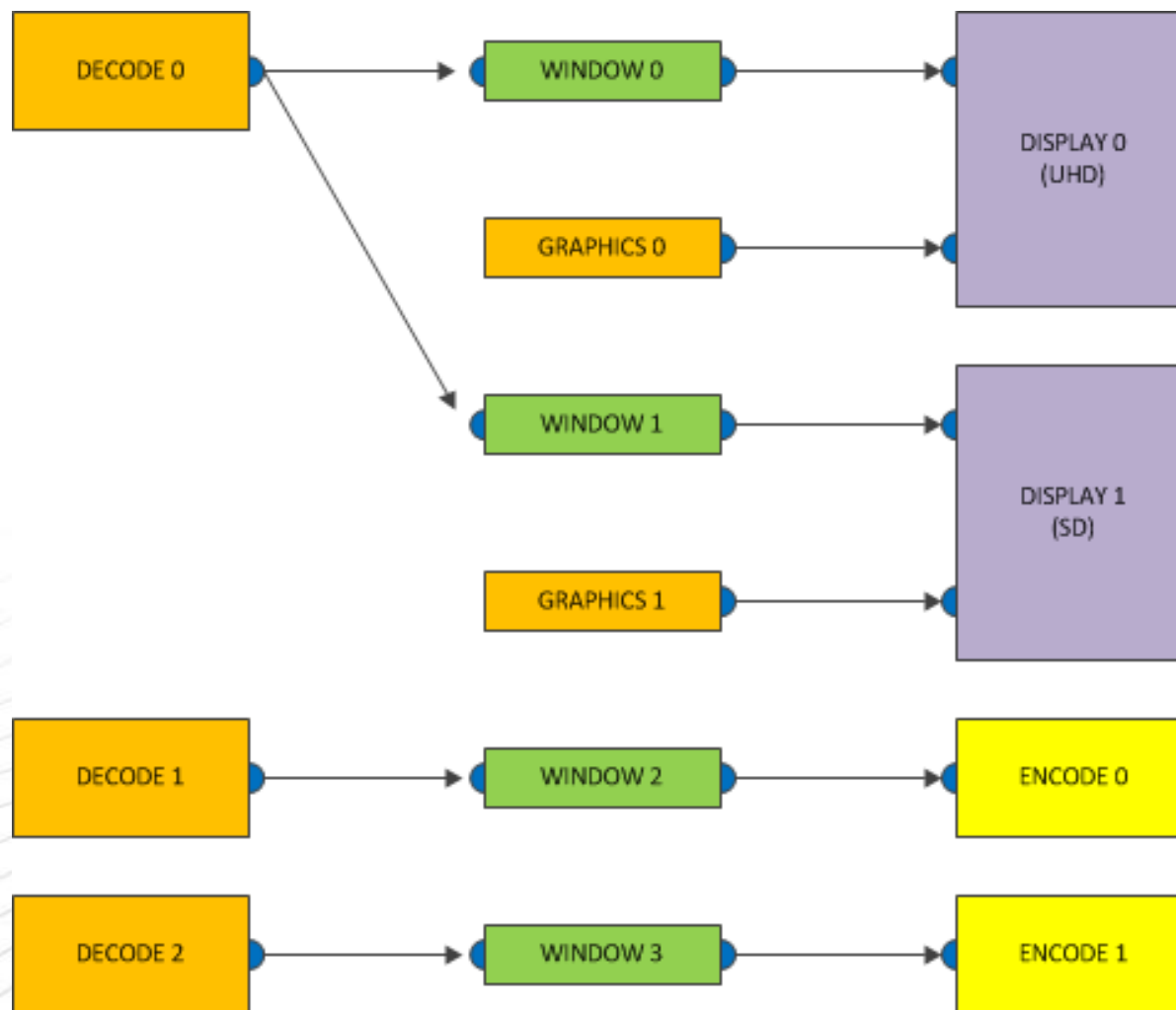# BOX MODE #9

7439 Bx

- **Required memory speed: 2x 32-bit DDR3-2133 or 2x 32-bit DDR4-2400**
  - High-temperature refresh supported

- **Features:**
  - 3840x2160p60 10-bit decode for MAIN
  - UHD + SD display
  - Dual independent transcoding from 1080p50 HEVC / 1080p25 AVC to 1080p25
    - Source cannot come from display decoder
  - No PIP support
  - No Multi-PIP support
  - No HDMI input support

- **For each source, you may toggle between any of the provided options.**
  - Only one option enabled at a given time.
- **Decode 0**
  - 3840x2160p60 10-bit HEVC
  - 3840x2160p60 8-bit VP9
  - 1920x1080p60 8-bit AVC / MPEG

- **Decode 1 (Transcode)**
  - 1920x1080p50 10-bit HEVC
  - 1920x1080p50 8-bit VP9
  - 1920x1080p25 / 50i 8-bit AVC / MPEG
- **Decode 2 (Transcode)**
  - 1920x1080p50 10-bit HEVC
  - 1920x1080p50 8-bit VP9
  - 1920x1080p25 / 50i 8-bit AVC / MPEG
- **Graphics 0 (UHD)**
  - 1080p60 32-bit ARGB
- **Graphics 1 (SD)**
  - 480p60 32-bit ARGB
  - 576p50 32-bit ARGB

HARDWARE RESOURCE MAPPING

Decoder	MFD	Usage	Hardware
Decode 0	MFD0	Display	HVD0
Decode 1	MFD2	Transcode 0	HVD1
Decode 2	MFD3	Transcode 1	HVD1

WINDOW LIMITATIONS

- **Window 0 (MAIN / UHD)**
  - Up to full-screen display (smooth scaling)
  - 10-bit support / 1080i60 10-bit de-interlacing

- **Window 1 (MAIN / SD)**
  - Up to full-screen display (smooth scaling)

- **Window 2 (Transcode)**
  - Full-screen display
  - 1080i50 8-bit de-interlacing

- **Window 3 (Transcode)**
  - Full-screen display
  - 1080i50 8-bit de-interlacing

DISPLAY AND ENCODE LIMITATIONS

- **Display 0 (UHD)**
  - 3840x2160p60

- **Display 1 (SD)**
  - 480i60
  - 576i50

- **Encode 0**
  - 1080p25 8-bit AVC

- **Encode 1**
  - 1080p25 8-bit AVC