

# **BOX MODE #4**

7439 Bx

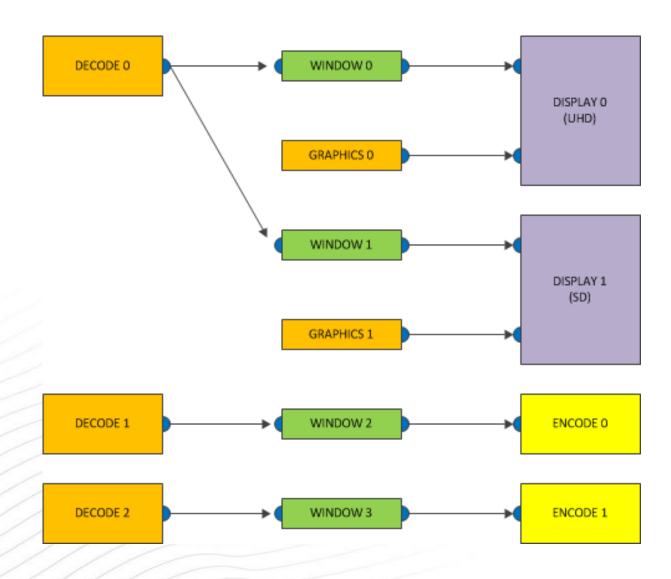
#### **BOX MODE #4 – SUMMARY**



- Required memory speed: 2x 32-bit DDR3-2133
  - No high-temperature refresh support
- 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

### POSSIBLE VIDEO ROUTINGS





#### **SOURCE LIMITATIONS**



- 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