

# BOX MODE #5



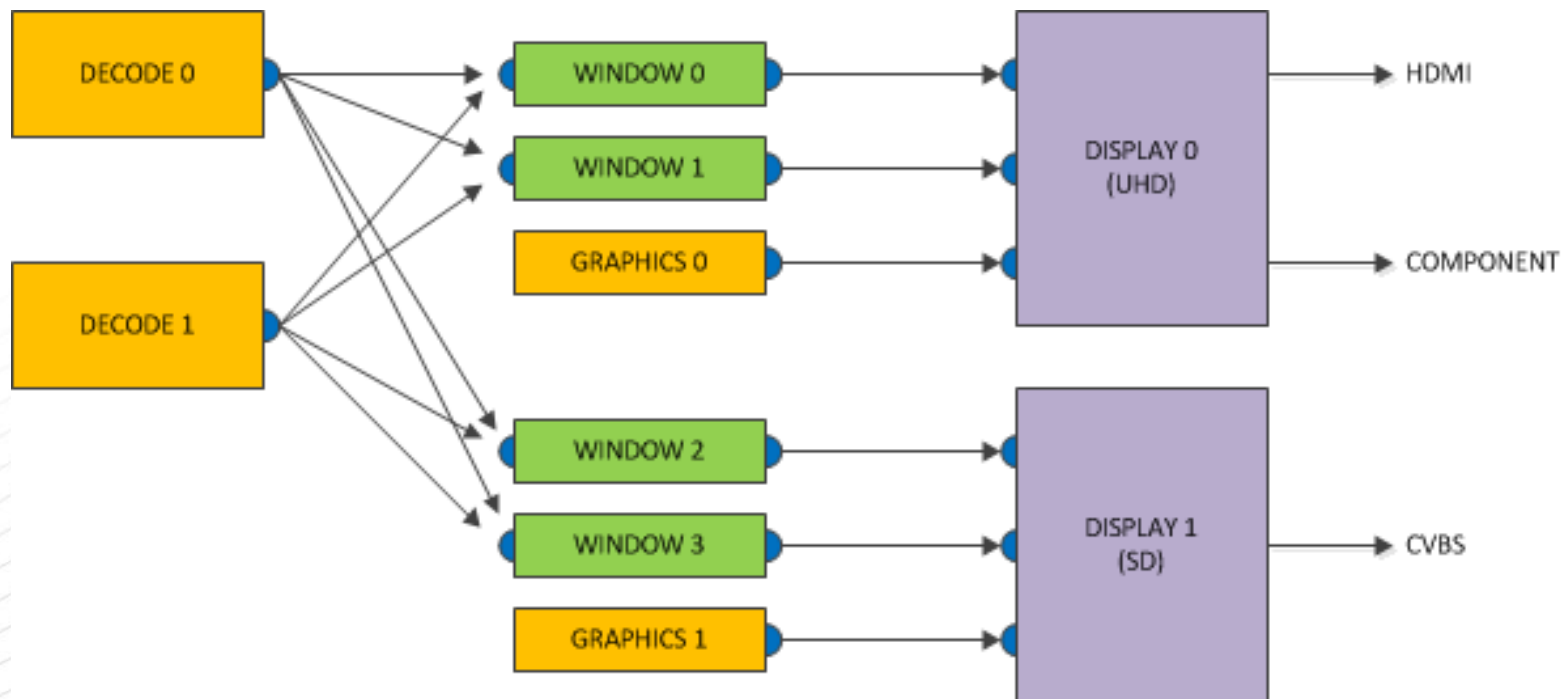
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## BOX MODE #5 – SUMMARY



- **Required memory speed: 2x 32-bit DDR3-2133**
  - Supports high-temperature refresh
- **Features**
  - Supports single-source mode:
    - 3840x2160p60 10-bit HEVC decode / 1080p60 8-bit AVC decode
    - MAIN (no PIP).
  - Supports MAIN + PIP mode:
    - Two decoders limited to 1080p60 10-bit HEVC / 1080p30 8-bit AVC
    - MAIN + PIP display
  - UHD + SD simultaneous output

# 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**
  - Single source mode:
    - 3840x2160p60 10-bit HEVC
    - 1080p60 8-bit AVC
  - MAIN + PIP mode:
    - 1080p60 10-bit HEVC
    - 1080p30/60i 8-bit AVC
- **Decode 1**
  - Cannot be enabled when decode 0 is in single-source mode (i.e. decoding 3840x2160p)
  - MAIN + PIP mode:
    - 1080p60 10-bit HEVC
    - 1080p30/60i 8-bit AVC
- **Graphics 0 (UHD)**
  - 1080p60 32-bit ARGB
- **Graphics 1 (SD)**
  - 480p60 32-bit ARGB
  - 576p60 32-bit ARGB

# WINDOW LIMITATIONS



- **Window 0 (MAIN - UHD)**
  - Up to full-screen display with smooth scaling
  - 10-bit support
  - 1080i60 10-bit de-interlacing
- **Window 1 (PIP – UHD)**
  - Up to full-screen display with smooth scaling
  - 1080i60 8-bit de-interlacing
- **Window 2 (MAIN - SD)**
  - Up to full-screen display
  - 8-bit support
- **Window 2 (PIP - SD)**
  - Up to full-screen display
  - 8-bit support



# DISPLAY AND ENCODE LIMITATIONS



## ■ Display 0 (UHD)

- 3840x2160p60 12-bit 4:2:0 (HDMI)
- 3840x2160p60 12-bit 4:2:2 (HDMI)
- 3840x2160p60 8-bit 4:4:4 (HDMI)
- 1920x1080p60 (component)
- Only one display format at a time
  - If you want 1080p60 component, HDMI also needs to be 1080p60.

## ■ Display 1 (SD)

- 480i60 (CVBS)
- 576i50 (CVBS)