

BOX MODE #2

7445 D0

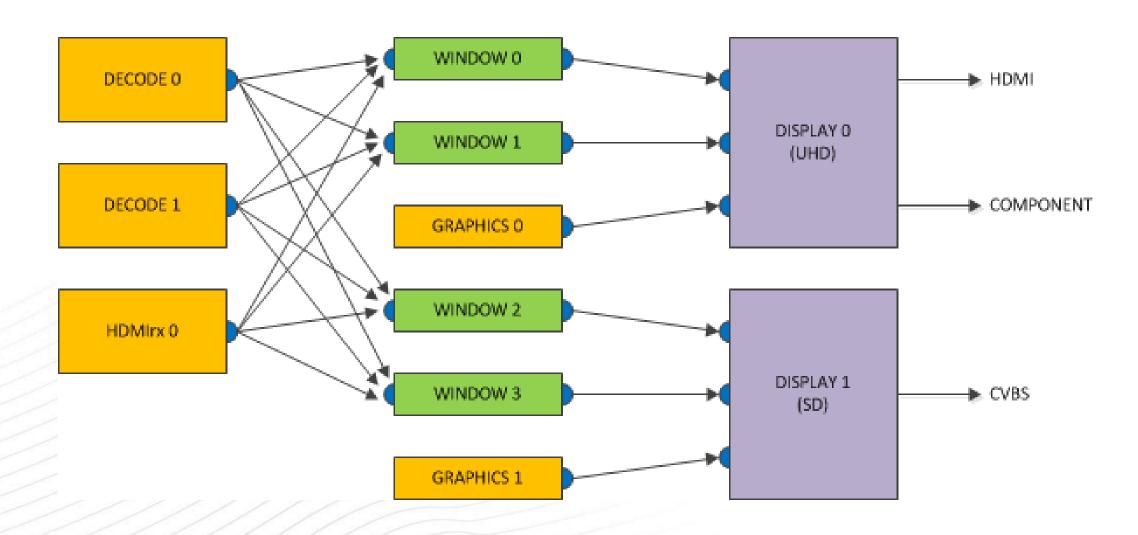
BOX MODE 2 - SUMMARY



- Memory speed: 2x 32-bit DDR3-2133
 - Supports extended temperature range refresh
- Supports:
 - 4kp60 10-bit HEVC decode
 - MAIN + PIP
 - Multi-PIP (up to four displayed at a time)
 - UHD + SD simultaneous outputs
 - HDMI input
- Suitable for 7252 D0

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 (MAIN)
 - 3840x2160p60 10-bit HEVC
 - 1080p60 8-bit AVC
 - Multi-PIP: (3x)
 - 1920x1080p60 10-bit HEVC
 - 1920x1080p30/60i 8-bit AVC
- Decode 1 (PIP)
 - 1920x1080p60 10-bit HEVC
 - 1920x1080p30/60i 8-bit AVC

- Graphics 0
 - 1080p60 32-bit ARGB
- Graphics 1
 - 480p60 32-bit ARGB
 - 576p50 32-bit ARGB
- HDMIrx 0
 - 4096x2160p60 12-bit 4:2:0
 - 4096x2160p60 12-bit 4:2:2
 - 4096x2160p60 8-bit 4:4:4

WINDOW LIMITATIONS



Window 0 (MAIN)

- Up to full-screen display (smooth scaling)
- Multi-PIP:
 - Up to three windows where the total combined display area is up to full-screen.
 - 480i60 / 576i50 8-bit de-interlacing
- 10-bit support
- 1080i60 10-bit de-interlacing

Window 1 (PIP)

- Up to ½ x ½ full-screen display (smooth scaling)
- 8-bit support
- 1080i60 8-bit de-interlacing

Window 2 (MAIN)

- Up to full-screen display (smooth scaling)
- 8-bit support

Window 3 (PIP)

- Up to ½ x ½ full-screen display (smooth scaling)
- 8-bit support

DISPLAY 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)

MULTI-PIP USAGE



- Multi-PIP is when a single decoder is capable of handling multiple full-resolution and a single display path can send them to the display.
 - Here a "multi-PIP decode" is a standard 1080p30/60i 8-bit AVC channel.
- These channels can be decoded, displayed and composited into a single display.
 - In this box mode, when combined with the PIP path, the final display can provide four independent multi-PIP decodes.
 - The display can be up to 3840x2160p60.
- For improved quality, each multi-PIP also has a 480i60 capable de-interlacer.

