

Box mode #4

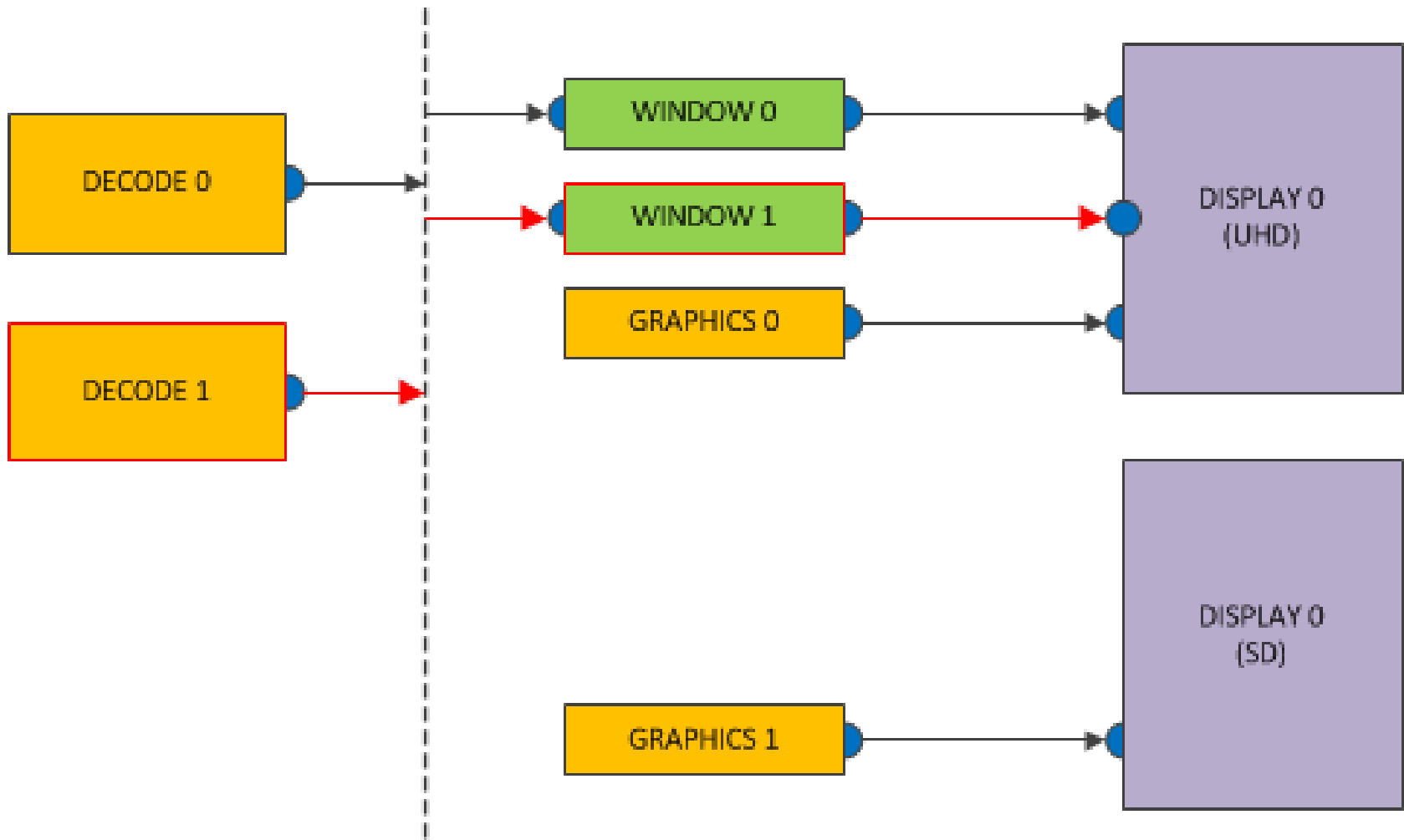
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Box mode #4 – Summary

- Required memory speed: 1x 32-bit DDR3-2133 or 32-bit DDR4-2400
 - No high-temperature refresh
- Features:
 - Single 3840x2160p60 decode or dual 1080p60 decode
 - UHD display
 - Main + limited PIP
 - Decode and MAIN window display limitations for 3840x2160p cases.
 - Multi-PIP (3x) supported
 - Independent SD display supported (graphics only – no video)
 - No HDMI input
 - No transcoding

Possible video routings



Source limitations

- Decode 0
 - 3840x2160p60 10-bit HEVC / VP9
 - 3840x2160p30 8-bit AVC
 - 1920x1080p30/60i 8-bit MPEG2
 - Multi-PIP mode (3x)
 - 1920x1080p30/60i 10-bit HEVC / VP9
 - 1920x1080p30/60i 8-bit AVC / MPEG2
 - No MTG support
- Decode 1
 - Must be inactive when Decode 0 is handling any single source greater than 4kp30.
 - Can remain active while Decode 0 is in multi-PIP 3x mode.
 - 1920x1080p60 10-bit HEVC / VP9
 - 1920x1080p60 8-bit AVC
 - 1920x1080p30/60i 8-bit MPEG2
- Graphics 0 (UHD)
 - 1080p60 32-bit ARGB
- Graphics 1 (SD)
 - 480p60 or 576p50 32-bit ARGB

HARDWARE RESOURCE MAPPING

Decoder	MFD	Hardware
Decode 0	MFD0	HVD0
Decode 1	MFD1	HVD0

■ Window 0 (MAIN / UHD)

- 1080i60 de-interlacing
- When the display format is less than or equal to 1080p:
 - Up to full-screen (smooth-scaling)
- When the display format is greater than 1080p:
 - Up to full-screen with live mode (no smooth-scaling)
- Multi-PIP (3x) support
 - 480i60 de-interlacing
 - Up to 50%x50% display rectangle per multi-PIP.

■ Window 1 (PIP / UHD)

- Must be inactive when Decode 0 is handling any single source greater than 4kp30.
 - Can remain active while Decode 0 is in multi-PIP 3x mode.
- Up to ½ x ½ screen (smooth-scaling)
- No de-interlacing

Display and encode limitations

- Display 0 (UHD)
 - 3840x2160p60
- Display 1 (SD)
 - 480i60