

Box mode #2

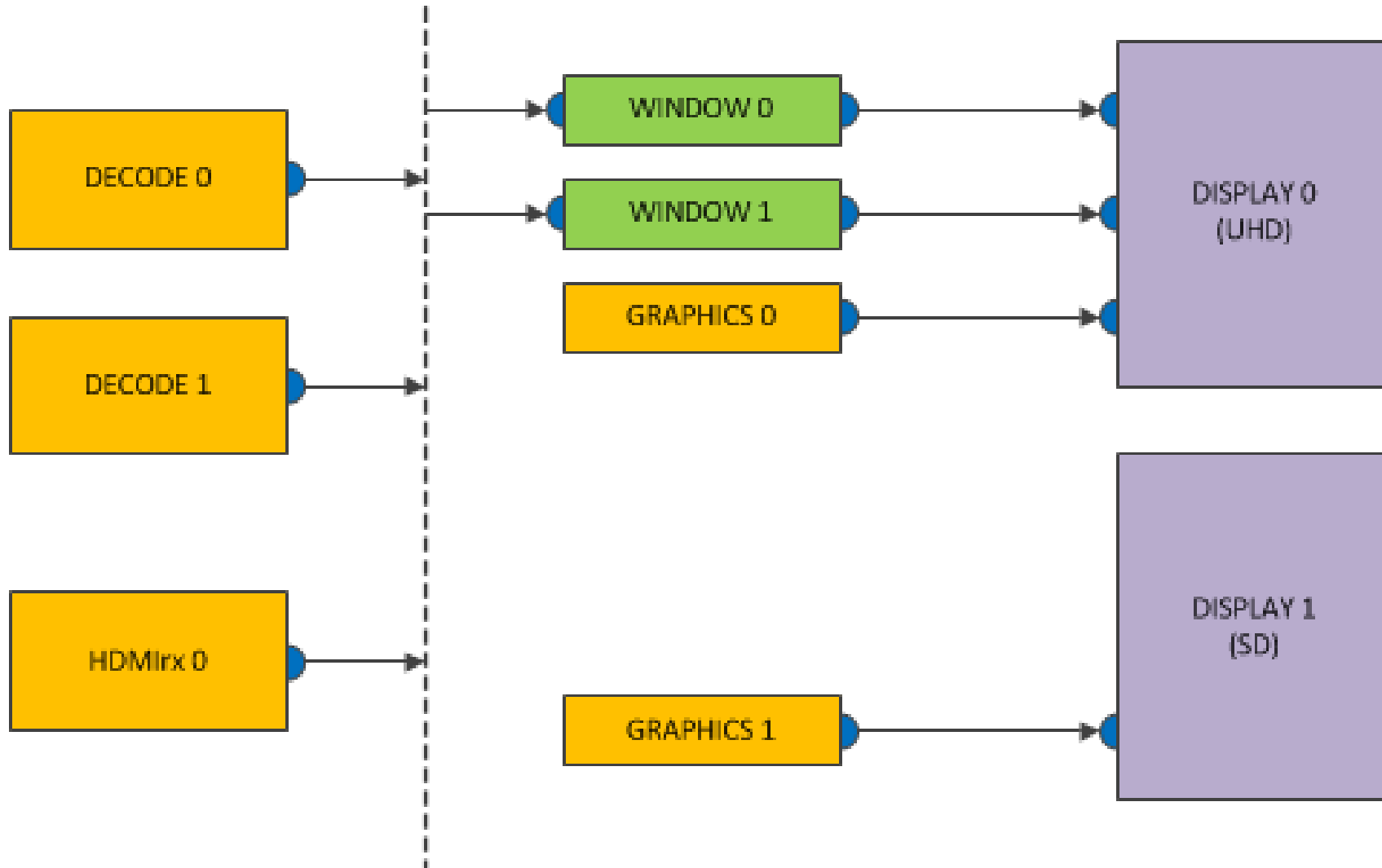
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Box mode #2 – summary

- Required memory speed: 2x 32-bit LPDDR4-3200
 - High-temperature refresh not supported
- Features:
 - Two 4kp60 capable decoders
 - UHD with MAIN + PIP
 - SD (graphics only)
 - Multi-PIP support (3+3)
 - HDMI input
 - No transcode support

Possible video routings



Source limitations

- Decode 0
 - 3840x2160p60 10-bit HEVC / VP9
 - 1920x1080p60 8-bit AVC / MPEG2
 - Multi-PIP (3x)
 - 1920x1080p60 10-bit HEVC / VP9
 - 1920x1080p60 8-bit AVC / MPEG2
 - MTG supported
 - Supports VP9 super-frame
- Decode 1
 - 3840x2160p60 10-bit HEVC / VP9
 - 1920x1080p60 8-bit AVC / MPEG2
 - Multi-PIP (3x)
 - 1920x1080p60 10-bit HEVC / VP9
 - 1920x1080p60 8-bit AVC / MPEG2
 - MTG supported
 - Supports VP9 super-frame
- HDMIrx 0
 - Up to 3840x2160p60
- Graphics 0 (UHD)
 - 1080p60 32-bit ARGB
 - Requires graphics compression
- Graphics 1 (SD)
 - 480p60 32-bit ARGB
 - 576p50 32-bit ARGB

HARDWARE RESOURCE MAPPING

Decoder	MFD	Hardware
Decode 0	MFD0	HVD0
Decode 1	MFD1	HVD1

Window limitations

- Window 0 (MAIN / UHD)
 - Up to full-screen display (smooth scaling)
 - 1080i60 de-interlacing
 - Multi-PIP (3x)
 - Up to 480i60 de-interlacing
 - Each window is limited to 25% of the canvas
- Window 1 (PIP / UHD)
 - Up to full-screen display (smooth scaling)
 - 1080i60 de-interlacing
 - Multi-PIP (3x)
 - Up to 480i60 de-interlacing
 - Each window is limited to 25% of the canvas

Display and encode limitations

- Display 0 (UHD)
 - 3840x2160p60
 - Can drive the SD CVBS output if the format is set to 480i60 or 576i50
- Display 1 (SD)
 - 480i60
 - 576i50