

Box mode #4

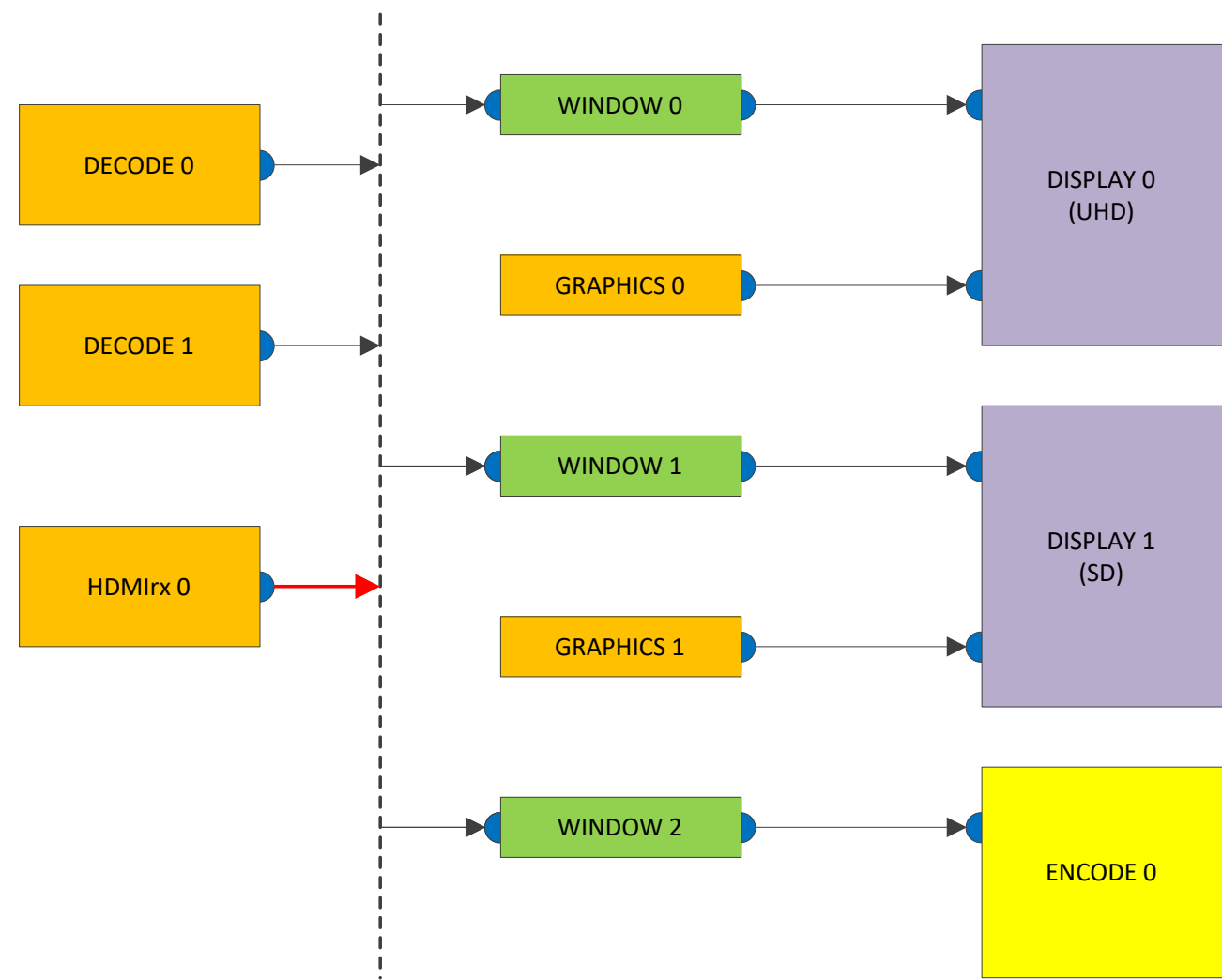
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Box mode #4 – summary

- Required memory speed: 2x 32-bit LPDDR4-3200
 - No high-temperature refresh
- Features:
 - Two 4kp60 capable decoders
 - UHD + SD output
 - MAIN only (no PIP)
 - Multi-PIP support (3+0)
 - HDMI input (routed to display windows only)
 - One transcode to 1080p60

Possible video routings



Source limitations

- Decode 0 / 1
 - 3840x2160p60 10-bit HEVC / VP9
 - 3840x2160p60 8-bit AVC
 - 1920x1080p60 8-bit MPEG2
 - Multi-PIP (3x)
 - 1920x1080p60 10-bit HEVC / VP9
 - 1920x1080p60 8-bit AVC / MPEG2
 - MTG supported
 - Does not support VP9 super-frame
- HDMIrx 0
 - Up to 3840x2160p60
 - Cannot be routed to the transcode path
- 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 (MAIN / SD)
 - Up to full-screen display (smooth scaling)
 - No de-interlacing
 - Multi-PIP (3x)
 - Each window is limited to 25% of the canvas
- Window 2 (MAIN / Encode 0)
 - Full-screen only
 - 1080i60 de-interlacing
 - No CAP/VFD available
 - HDMI input not supported
 - Cannot share video source with display window

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
- Encode 0
 - Up to 1080p60 8-bit