



# Box mode #11

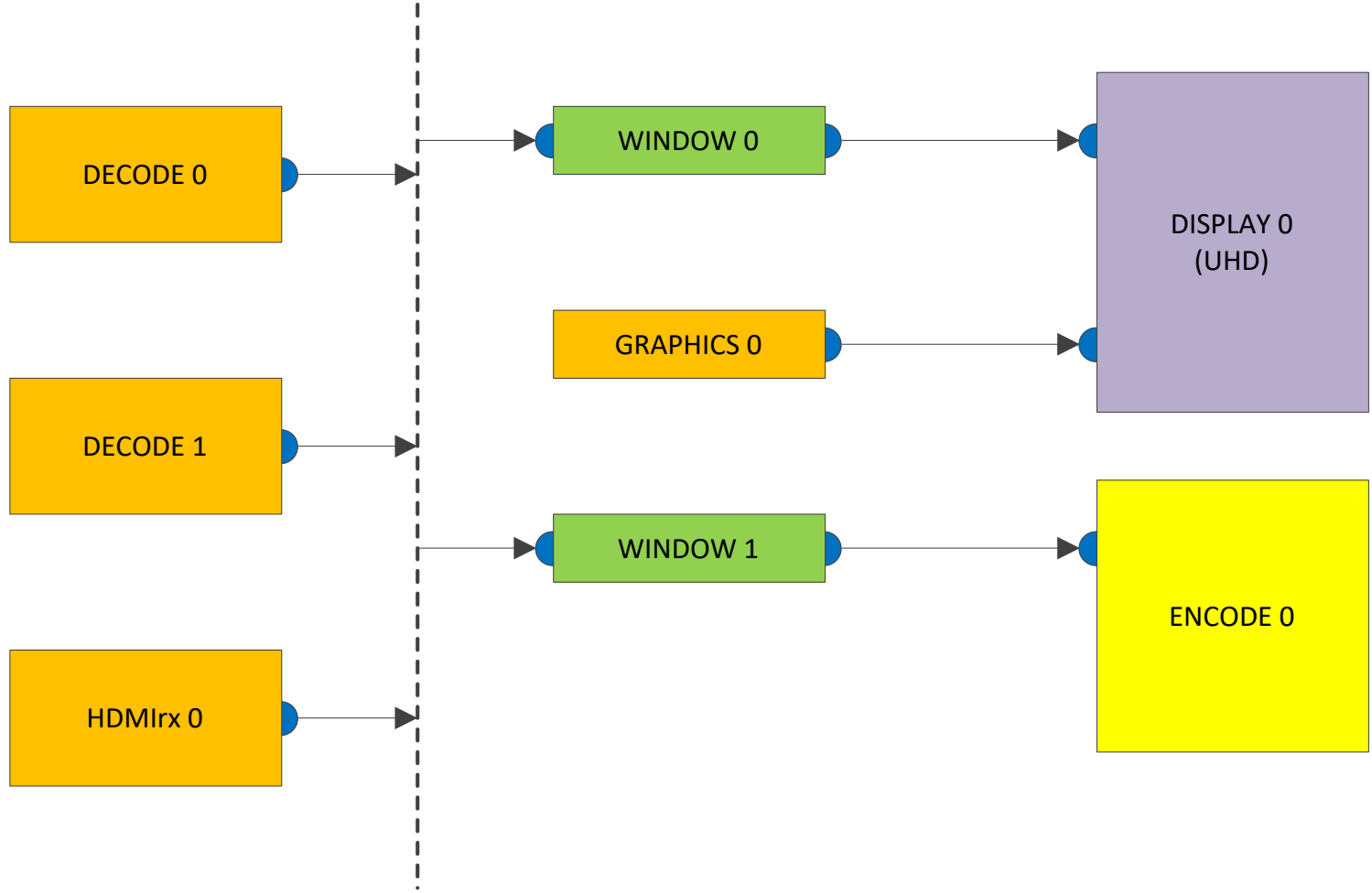
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# Box mode #11

- Required memory speed: 1x 32-bit LPDDR4-3733
  - No high-temperature refresh
- Features:
  - Two decoders:
    - One 3840x2160p60 10-bit decoder
    - One 1920x1080p60 10-bit decoder
  - Multi-PIP supported (3+0)
  - UHD display (no SD)
  - Main only (no PIP)
  - HDMI input supported
  - Transcoding to 720p30

# Possible video routings



# Source limitations

- Decode 0
  - 3840x2160p60 10-bit HEVC / VP9
  - 1920x1080p60 8-bit AVC / MPEG2
  - Multi-PIP (3x)
    - 1920x1080p60/60i 10-bit HEVC / VP9
    - 1920x1080p60/60i 8-bit AVC / MPEG2
  - MTG supported
- Decode 1
  - 1920x1080p60 10-bit HEVC / VP9
  - 1920x1080p60 8-bit AVC / MPEG2
  - MTG supported
- HDMIrx
  - Up to 3840x2160p60
- Graphics 0 (UHD)
  - 1080p60 32-bit ARGB
  - Requires graphics compression

# Hardware resource mapping

Decoder	MFD	Hardware
Decode 0	MFD0	HVD0
Decode 1	MFD1	HVD0

# Window limitations

- Window 0 (MAIN / UHD)
  - Up to full-screen display (smooth scaling)
  - 1080i60 de-interlacing
  - Multi-PIP (3x)
    - Each display rectangle up to 25% x 25%
    - 480i60 de-interlacing
- Window 1 (MAIN / Encode 0)
  - Full-screen only
  - No de-interlacing

# Display and Encode limitations

- Display 0 (UHD)
  - 3840x2160p60
- Encode 0
  - Up to 720p30 8-bit