



Status of Intel Camera drivers

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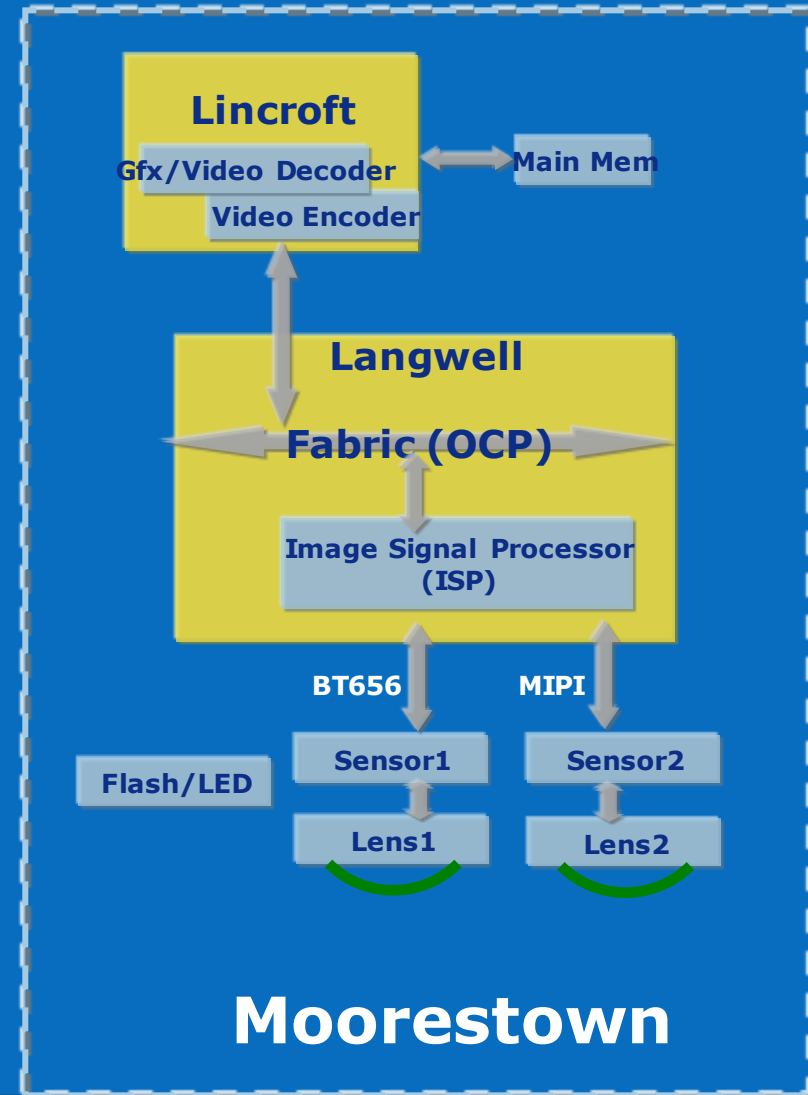
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Intro - Camera Imaging on Moorestown

- Fixed function HW
- MIPI CSI, BT656 & 1 pipe
- RAW 12
- Integrated JPEG encoder with programmable quantization and huffman tables
- Demosaicing & 3A support
- Noise reduction
- 720p video capture 30fps
- VGA video conference 30fps
- Multiple data out formats supported: YUV422/420 (planar and semi planar), RGB
- Arbitrary scaler in main/preview path
- Defect correction and image enhancement
- Image effects
- ...
-



MRST Camera Imaging driver status

- MRST Camera Imaging drivers include:
 - 1 ISP controller driver
 - 4 Camera Sensor drivers: OV5630 (5MP, MIPI), KMOT (5MP, MIPI), OV2650 (2MP, Parallel), OV9665(1.3MP, Parallel)
 - 1 LED flash driver
- WIP to address the comment for the 3rd submission.
 - Migrated to v4l2-subdev and video-buf management
 - Switched to using media bus API
 - Implemented the queryctrls, g/s_ctrl. Need migrate to Han's new control framework proposal.
 - To remove the sensor configuration structure.
- Opens
 - video buf core change – deal with buffer pre-allocator.
 - proposal to extend frame format on the media bus with:
 - Parallel interface information:
 - H sync type/polarity: syncpos/syncneg, refpos/refneg
 - V sync polarity: syncpos/syncneg
 - edge selection: rising/falling
 - MIPI interface information :
 - MIPI mode – YUVxxx, RGBxxx, RAW_x, etc
 - MIPI Lane channel configuration