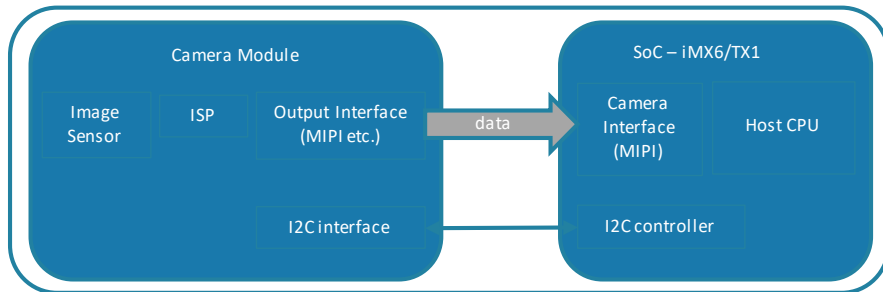




Linux MIPI Camera Driver



BENEFITS

- Camera's proprietary data is not exposed through driver source code
- The same architecture was used in upcoming NVIDIA / Jenson series.

RESULTS

- New driver developed for use in upcoming automotive/industrial platform

CUSTOMER CHALLENGE

- Customer is a leading Japanese Imaging Sensor solution provider
- To integrate their image sensors with major embedded platforms
- Ensure that the proprietary sensor information is not exposed to third party without breaking Linux architecture

SCOPE

- Develop Linux drivers for their MIPI camera sensors
- Design generic driver and middleware so that camera's proprietary data is not exposed through driver source code

SOLUTION

- Developed MIPI camera sensor drivers for Jetson TX1 and HummingBoard
- Added support for Raw image formats (Raw 10 bit etc.) in BSP
- Took support from SoC/board vendors to resolve the issues

FEATURES

- Design of generic driver and middleware shall fit into V4L2 framework and I2C framework
- Technology: Jetson TX1, HummingBoard, V4L2, MIPI CSI, I2C