

- Above is the block diagram to interface 12MP sony cmos image sensor to TI DM8168 video processor.
- Our understanding is that DM8168 cannot support 4000*3000 resolution but can support maximum of 1080p60 input video capture. Also Sony image sensor interface is 10ch subLVDS which is not supported by DM8168.
- LVDS324 deserializer has 11ch subLVDS input lines and can capture 4000*3000 resolution frame from Sony sensor.
- LVDS324 can output at the maximum of 1080p60(1920*1080 resolution) which can be input to DM8168 video port.
- Sony image sensor input clock is 72Mhz and data rate support is 576Mbps per channel.wheras the LVDS324 can support upto 648Mbps data rate.
- LVDS324 downscales the 12MP resolution to 1080p with pixel clock of 162Mhz.Output to DM8168 is parallel
 interface with pixel clock upto 165Mhz.