

## Automotive Grade Bridge IC(eDP to Open LDI)

### ■ Descriptions

Golden Gate is an eDP(rev.1.4a) to Open LDI bridge device which can realize the connectivity between the eDP source to the display panel with the Open LDI interface. It can receive the data rate of 1.62Gbps/2.7Gbps with 1 lane/2lane eDP and convert it to transport with 2ch Open LDI signaling with the pixel clock frequency up to 154MHz (per 1ch).

The specification is simple enough so that it can be easily inserted into existing system display architectures with minimal modifications required, making it an ideal solution for both existing and future designs.

Golden Gate is also qualified for automotive design including AEC-Q100 certification and several functional safety features.

### ■ Highlights (Features)

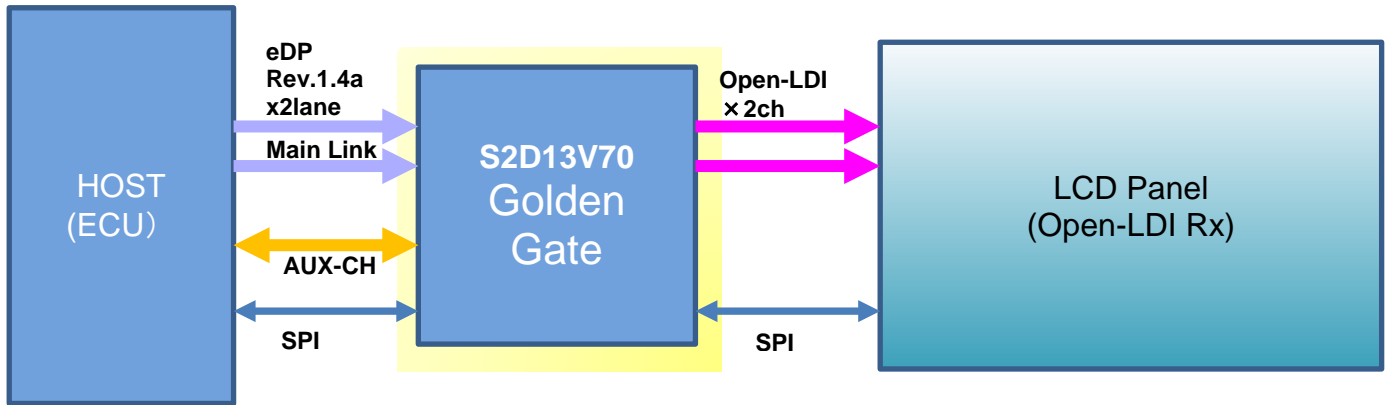
- Simple Bridge chip (eDP to Open LDI) with Automotive grade design
- AEC-Q100 certified
- Functional safety features
  - \*Input resolution size monitoring
  - \*Input pixel clock monitoring
  - \*Input Video data CRC
  - \*Register setting CRC
  - \*Watermark function

### ■ Other Features

- Power Supply : 1.8V/3.3V (Dual Supply)
- Host interface : SPI
- Display Interface (input) : eDP (rev.1.4a) x 1 or 2 lanes
- Display Interface (output) : Open LDI x 1 or 2ch
- Display resolution : Max FHD (1920x1200x60fps)
- Image Correction : 8bit digital Gamma LUT + 2bit Dithering
- Package Type : PFBGA8-81  
(Body size = 8mm x 8mm x 1.2mm、 Ball Pitch= 0.8mm)

# S2D13V70

## System Block Diagram



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