

DISPLAY CONTROLLER FOR HIGH RESOLUTION HEAD UP DISPLAY

■ DESCRIPTIONS

The S2D13V42 is a warping correction controller IC specific to High Resolution Head Up Display.

It features an internal Surface Correction Engine which fixes visual distortions caused by non-linear display surfaces. It is also able to simultaneously perform other image manipulations such as rotation and scaling.

The S2D13V42 is qualified for automotive design including AEC-Q100/IATF16949 certification and comprehensive safety features.

The S2D13V42 can be easily inserted into existing system display architectures with minimal modifications required, making it an ideal solution for both existing and future designs.

■ FEATURES

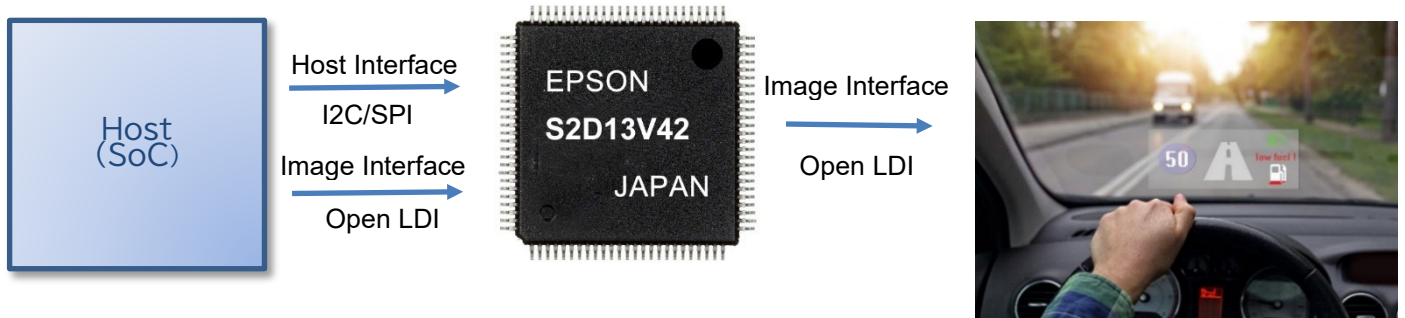
- ◆ Warping Correction specific to Head Up Display
- ◆ Supports High Resolution (up to 1280 x 720)
- ◆ Rotation,Scaling
- ◆ Pitch Correction
- ◆ Comprehensive Safety Features

■ OUTLINE SPECIFICATIONS

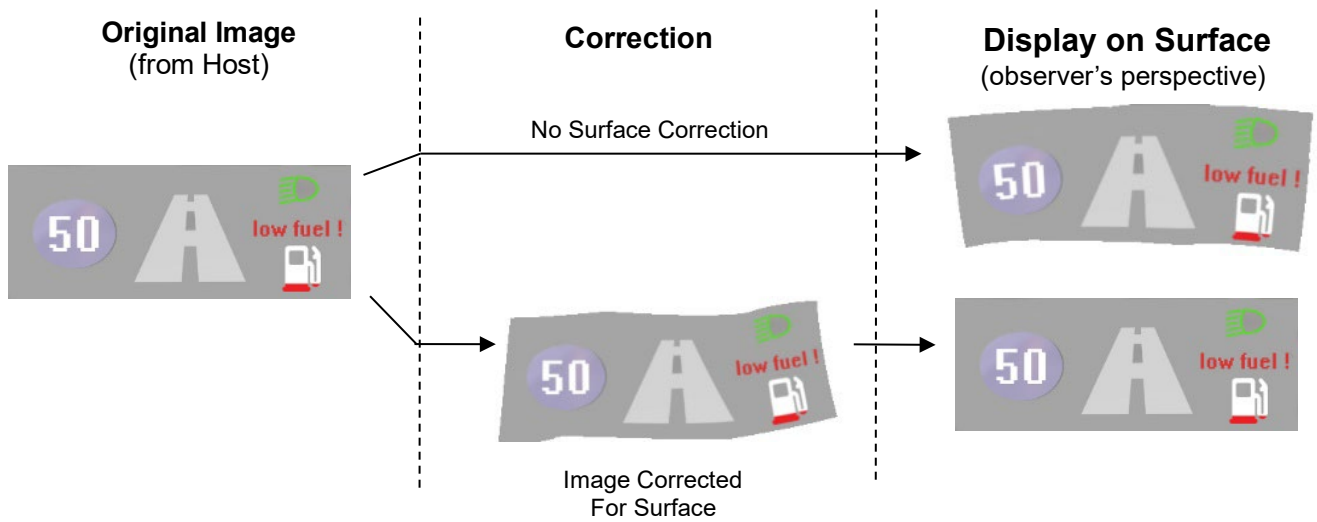
Part Number	S2D13V42
Power Supply	3.3V (I/O)
	1.2V (Internal)
Input Interface	Open LDI
Output Interface	Open LDI
Host Interface	SPI/I2C
Resolution	Up to 1280x720
Safety Features	Comprehensive Safety Features
Automotive QA	AEC-Q100
Operating Temperature	-40~ +105°C
Miscellaneous	Pitch Correction
	Internal PLL ,Internal SSCG
Package	QFP15-100PIN(P-LQFP100-1414-0.50)

S2D13V42

SYSTEM BLOCK DIAGRAM



ORIGINAL SURFACE CORRECTION ENGINE



S2D13V42

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