

CC4020L

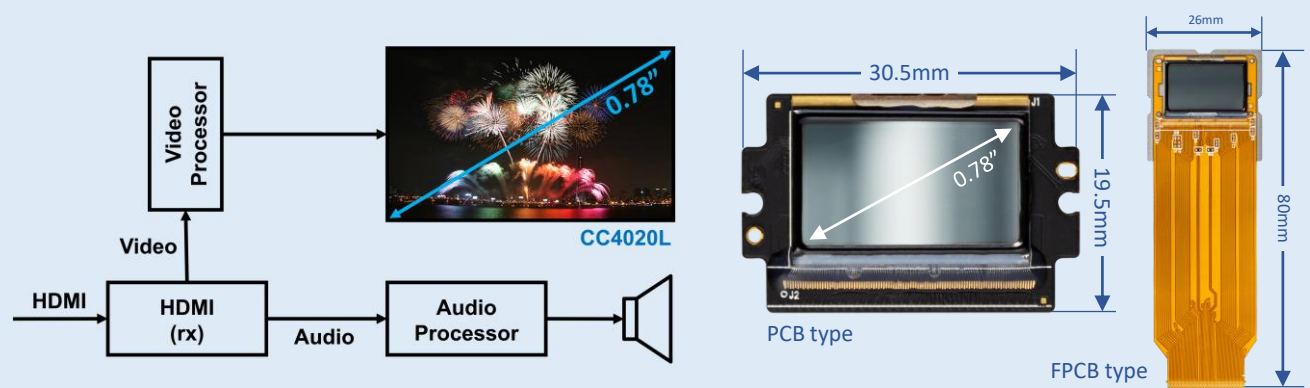
UHD LCoS SoC | 4096x2240 0.78"



CC4020L is a 4096x2240 pixel array based imager for micro display applications, which consists of Liquid Crystal on Silicon(LCoS) Spatial light modulator(SLM) micro display.

CC4020L is designed to be used in wide range of applications including virtual reality(VR), augmented reality(AR) and other projection displays. Its sharp 4K Ultra High Definition(UHD) resolution allows users to experience media in great details and vibrant colors with 120 frames per second(fps).

Its highly efficient design utilizes loading of 32 pixels simultaneously to minimize power consumption without sacrificing the refresh rate to provide smooth and realistic motion pictures.



Features

- UHD 4096x2240 resolution
- 120 frame per sec refresh rate
- Efficient IO placing for system integration
- Vivid colors with true black
- AR VR applications
- 32 parallel pixels loading
- Compact input data interface
- Horizontal and vertical image flipping
- Cost efficient system design
- Low power consumption

Parameter	Specification	Units
	CC4020L	
Pixel Matrix	4096 x 2240	Pixels
Active Matrix	3840 x 2160	Pixels
Active Matrix Area	17.28 x 9.72	mm
Display Size	0.78	in
Pixel Mirror / Pixel Pitch	4.27 / 4.5	um
Aperture Ratio	90.04	%
Dot Clock	125.0	MHz
Video Drive Method	Invert video every frame, 32 pixels per dot clock	