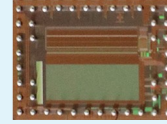


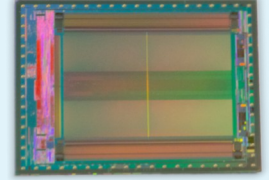
# TIME-OF-FLIGHT Product Family



**epc611**  
8x8 pixel

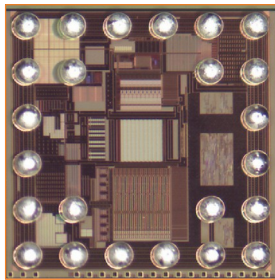


**epc635**  
160x60 pixel

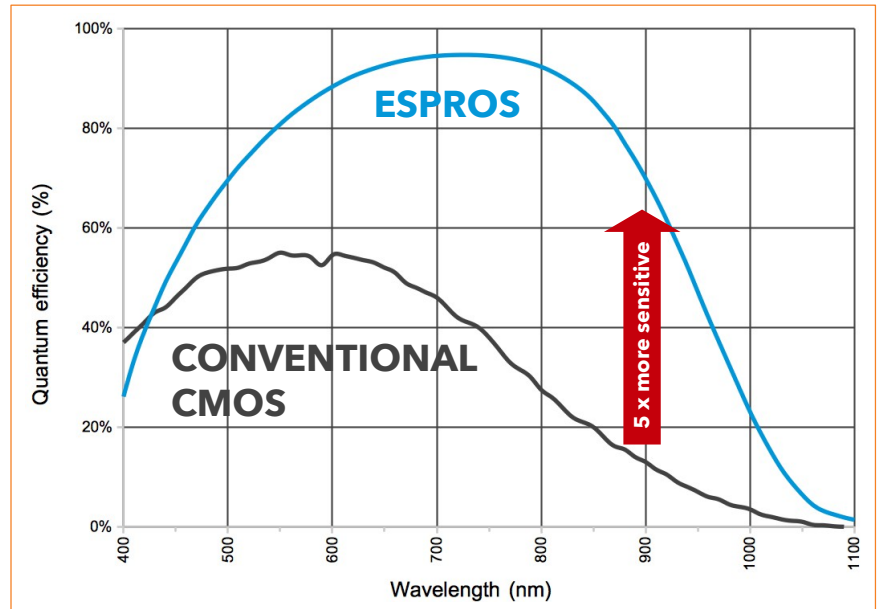


**epc660**  
320x240 pixel

## TECHNOLOGY



- Ultra small CSP package
- No companion chip needed
- System on chip
- Unique CCD technology
- Outstanding ambient light suppression



## ESPROS USP<sub>s</sub>

- very high photo-sensitivity
- ambient-light tolerance
- on-chip ADC and control
- LED/VCSEL driver integrated

## ADVANTAGES

- 👍 extended distance range (10m +)
- 👍 reduced power consumption
- 👍 full sunlight tolerant (130 kLux)
- 👍 less BOM part count, less cost

## APPLICATIONS

Doors and Gates



People counting



Automotive



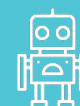
Gesture



Drones




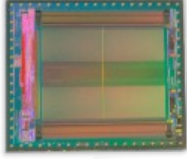
Robotics



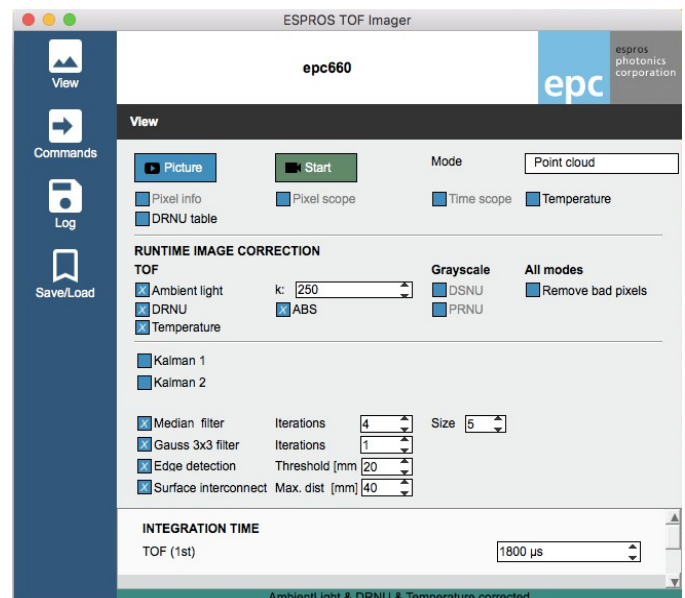
Many others



# TECHNICAL DATA OVERVIEW

Product	epc611	epc635	epc660	Conditions
Picture				
Pixel field	8 x 8	160 x 60	320 x 240	
Pixel pitch	20 x 20 $\mu\text{m}$			100% fill factor
Photosensitive area	0.16 x 0.16 mm	3.20 x 1.20mm	6.40 x 4.80 mm	
Packaging	CSP24	CSP44	CSP68	
Size	2.8 x 2.8 x 0.25 mm	6.3 x 4.2 x 0.25 mm	9.7 x 8.7 x 0.25 mm	Self-alignment to opt. axis
Frame rate	up to 8'000 fps	up to 488 fps	up to 156 fps	Rolling mode, $t_{\text{INT}} = 100\mu\text{s}$
	up to 2'000 fps	up to 122 fps	up to 39 fps	4 DCS mode, $t_{\text{INT}} = 100\mu\text{s}$
Output data	up to 18 bit DCS	12 bit DCS	12 bit DCS	
Data interface	SPI up to 16MHz	TCMI up to 80MHz	TCMI up to 80MHz	
Control interface	SPI	I <sup>2</sup> C	I <sup>2</sup> C	
Power consumption	155mW	300mW	750mW	at full frame rate

## Evaluation Kit for each chip available



## CONTACT INFORMATION

[www.espros.com](http://www.espros.com)

**Headquarters Switzerland**  
 phone: +41 58 411 03 00  
 email: sales@espros.com

**China Sales Office**  
 phone : +86 15021122587  
 email sales@espros.cn

**US/Canada Sales Office**  
 phone: +1 612 444 3600  
 email: sales\_us@espros.com