

ABSTRACT

IMAGE SENSOR AND IMAGE PROCESSING SYSTEM

Disclosed are an image sensor and an image processing system. The image sensor at least includes: a pixel collection circuit array, an activity detection unit, a low-power control unit, and a reading unit, and the pixel collection circuit array is coupled to the activity detection unit, the low-power control unit and the reading unit separately. The pixel collection circuit array is composed of a plurality of pixel collection circuits, and the pixel collection circuits monitor a light intensity change in a field of view and enter a trigger state when the light intensity change satisfies a certain conditions. The activity detection unit monitors a current value on a global activity detection signal line, and sets a low-activity enable signal to be valid when the current value is smaller than an activity threshold. The low-power control unit sets a global low-power enable signal to be valid when the low-activity enable signal is valid. The reading unit is reset when the global low-power enable signal is valid.

Figure 2