

ABSTRACT

The present disclosure provides an imaging method for an image sensor, an imaging apparatus and an electronic device. The image sensor includes a photosensitive pixel array and a filter arranged on the photosensitive pixel array. The filter includes an array of filter units. Each filter unit and a number of adjacent photosensitive pixels covered by the filter unit in the photosensitive pixel array form a synthesized pixel. The method includes: reading an output of the photosensitive pixel array, extracting pixel values of photosensitive pixels within different synthesized pixels from a read-out single-frame high-resolution image, and combining the pixel values so as to obtain a number of multi-frame low-resolution images; synthesizing the number of multi-frame low-resolution images. With the method according to embodiments of the present disclosure, an HDR image by synthesis can be obtained even there is only one frame output from the image sensor, thereby reducing the time period for waiting for data frames and avoiding the generation of ghosting.