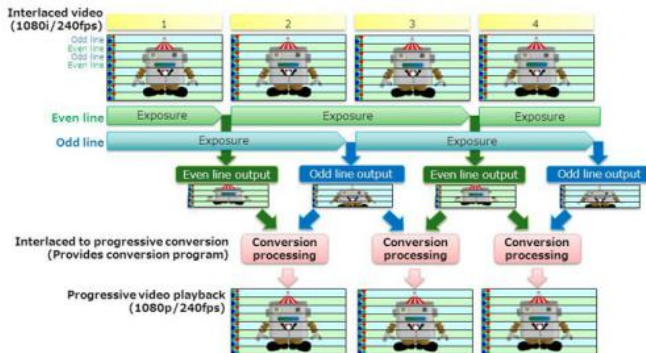


Toshiba CMOS image sensor technology allows full HD video at 240 frames per second

7 January 2014



CMOS image sensors incorporating "Bright Mode" can playback high quality video in [slow motion](#) at one-eighth standard speed, bringing new dimensions to imaging.

Toshiba's "Bright Mode" technology contributes to a wide variety of video applications, such as high-speed recording slow motion video, and continuous shooting. Sample sensors incorporating "Bright Mode" will be available in Q1 2014.

Provided by Toshiba

Toshiba Corporation today announced the development of "Bright Mode", a CMOS image sensor technology that allows smartphones and tablets to record Full HD video at 240 frames per second (fps), the industry's highest frame rate. "Bright Mode" realizes high quality slow motion playback.

High speed [video recording](#) requires a high frame rate with short exposure time, which results in underexposed images. "Bright Mode" technology secures double the exposure time by adopting interlaced video output, not the progressive output that standard CMOS sensors use. "Bright Mode" also employs charge binning, which doubles the electrical charge of each pixel, resulting in an image four times brighter than that from a CMOS sensor without "Bright Mode". The technology also realizes 240 fps equivalent Full HD video recording. Toshiba will also provide an interlace-progressive conversion program that enables users to offer high quality progressive video with low deterioration, without changing [frame rate](#).

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