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Multimedia video encoding of MPEG-2 by [Desiree](#)

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MPEG-2 compression standard was launched by MPEG organization in 1994, to achieve the video / audio services and the possibility of application interoperability. MPEG-2 standard is the standard for digital television and high-definition television applications in a variety of compression schemes under the detailed provisions and the system level, coding rate from 3 megabits per second to 100 megabits, the formal specification standard ISO / IEC13818 in. MPEG-2 is not a simple upgrade to MPEG-1, MPEG-2 has done in the system and send a more detailed provisions and further improved. Especially for MPEG-2 digital TV broadcast encoding and transmission, have been identified as SDTV and HDTV encoding standard.

MPEG-2 image compression is the use of the image of two properties: spatial correlation and temporal correlation. This makes two related images there are a lot of redundant information. If we can remove the redundant information, leaving only a small amount of non-relevant information for transmission can be significant savings for transmission band. And the receiver using these non-relevant information, according to some decoding algorithm can guarantee the quality of image restoration under the premise of the original image. A good compression scheme is to maximize the removal of redundant information in the image.

MPEG-2 encoding image is divided into three categories, are called I frames, P frames and B frames.

I frames used intra frame encoding, that is only a single image using the spatial correlation, and no correlation between use of time. P frames and B frames using inter-frame encoding, that is, while taking advantage of the spatial and temporal correlation. P frame images using only prior to the time prediction, can improve the compression efficiency and image quality. P frames can contain intra-coded part, that each P frame macroblock can be predicted before, it can be intra-coded. B frame prediction using two-way time, can greatly improve the compression ratio.

MPEG-2 encoding bit stream is divided into six levels. To better represent the encoded data, MPEG-2 with a syntax provides a hierarchical structure. It is divided into six layers, from top to bottom are: image sequence layer, group of pictures (GOP), picture, macroblock section, the macro block, block.

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I am a professional author to introduce the products about PC optimizer, computer maintenance, computing tips and how-to, etc..I'd like to share the newly information to everyone.

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