

Companion to article 3.3 of Block 3 (Codec Evolution). Print on A4 or US Letter.

MPEG-2 / ISO/IEC 13818 - the parts you meet

Part 1 (H.222.0)	Systems - MPEG-2 Transport Stream container, 188-byte packets
Part 2 (H.262)	Video - the codec itself, 16x16 macroblocks, 8x8 DCT, I/P/B frames
Part 3	Audio - backward compatible MPEG-1 Layer I/II/III extension
Part 7	AAC - Advanced Audio Coding, non-backward-compatible new design

Profile @ Level - what actually shipped

Profile @ Level	Max resolution	Max bitrate	Shipped in
MP @ ML (Main / Main)	720 x 576 @ 25 fps	15 Mbps	DVD, SD digital TV
MP @ HL (Main / High)	1920 x 1152 @ 60 fps	80 Mbps	First-gen HDTV (ATSC HD, DVB-S HD)
422P @ ML	720 x 608 @ 30 fps	50 Mbps	Sony IMX, MPEG IMX studio
422P @ HL	1920 x 1080 @ 60 fps	300 Mbps	HD broadcast contribution

Compression efficiency vs newer codecs (same picture quality)

MPEG-2 (H.262)	1995	100% (baseline)
H.264 / AVC	2003	~ 50% of MPEG-2
H.265 / HEVC	2013	~ 25% of MPEG-2
AV1	2018	~ 17% of MPEG-2
H.266 / VVC	2020	~ 12% of MPEG-2

Numbers are lab BD-rate at matched perceptual quality. Real-world savings are typically 2/3 to 3/4 of headline.

Patent status in 2026

- Last US MPEG-2 patent expired 23 February 2018.
- Worldwide effective expiry by January 2024 (Via LA). Only Malaysia remains active until 2035.
- You can ship MPEG-2 encoders and decoders with no royalty in every major commercial market.
- Audio (AAC) and DRM are separate licensing chains - clear those before declaring a product royalty-free.

Where MPEG-2 is still on the shortlist in 2026

- Broadcast ingest and contribution - any pipeline touching traditional TV, even when video inside TS is newer.
- Long-lived embedded fleets - hotel TV, hospital displays, signage, in-flight, older surveillance.
- Archival masters - public broadcasters and national archives keep MPEG-2 as a preservation format.
- Sub-second contribution links - MPEG-2's low encode latency beats H.264, HEVC, VVC for OB-van workflows.