Codec History Cheat Sheet

Every major video codec from H.120 (1984) to AV2 (2025) on one page. May 2026 edition · v1.0

Codec	Year	Body	Headline saving	Where it lives in 2026
H.120	1984	ITU-T	first digital	historical
H.261	1988	ITU-T VCEG	first hybrid	replaced by MPEG-1/-2
MPEG-1	1993	ISO MPEG	VHS @ 1.5 Mbps	replaced
MPEG-2/H.262	1995	joint	DVD/digital TV	legacy broadcast
H.263	1995	ITU-T VCEG	low-bitrate conf	replaced (Flash)
MPEG-4 Part 2	1999	ISO MPEG	DivX, Xvid era	replaced
H.264 / AVC	2003	joint JVT	-50% vs MPEG-2	dominant baseline
VP8	2010	Google	first royalty-free	replaced by VP9
H.265 / HEVC	2013	joint JCT-VC	-50% vs H.264	Apple + broadcast
VP9	2013	Google	HEVC-class	YouTube legacy
AV1	2018	AOMedia	-30% vs HEVC	modern web baseline
H.266 / VVC	2020	joint JVET	-40-50% vs HEVC	broadcast only
AV2	2025	AOMedia	-38% vs AV1	rolling out 2026

Governance camps

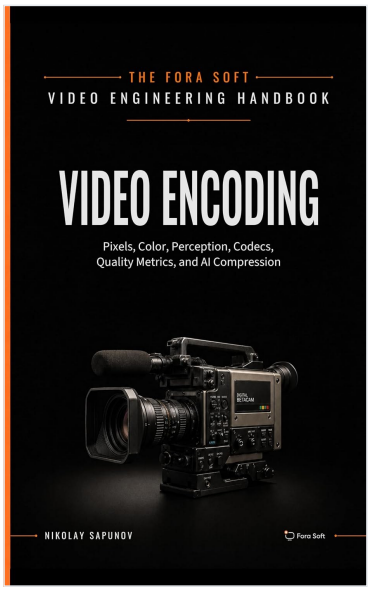
- **ITU-T VCEG** — telecoms-funded UN body
- **ISO/IEC MPEG** — consumer-electronics-funded standards body
- **Joint VCEG + MPEG** — single global codec, e.g. H.264, HEVC, VVC
- **Alliance for Open Media** — industry consortium, royalty-free (AV1, AV2)

Codec strategy shortcut for 2026

- Keep H.264 on every product. Hardware coverage is unbeatable; do not migrate away.
- Add HEVC where Apple devices dominate the viewer mix. Browsers still avoid it.
- Add AV1 wherever encoding cost amortises over millions of views. Web baseline now.
- Start AV2 trials in 2026 if you are Meta-, Netflix-, or YouTube-scale. Otherwise wait.
- VVC is broadcast-only. Skip it for web streaming.

Matched-quality bitrate for one hour of 1080p

	MPEG-2	H.264	HEVC	AV1	VVC	AV2
Bitrate	12 Mbps	6 Mbps	3 Mbps	2.1 Mbps	1.8 Mbps	1.3 Mbps
Storage	5.4 GB / hr	2.7 GB / hr	1.4 GB / hr	0.95 GB / hr	0.8 GB / hr	0.6 GB / hr



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This sheet puts forty years of codecs, their standards bodies and their 2026 status on a single page. Volume 1 picks up where the timeline stops: the hybrid block-based design every generation refines, what changed inside H.264, HEVC and AV1, and how bitrate savings are measured at matched quality.

WHAT YOU WILL FIND INSIDE

- The hybrid block-based coding loop from H.261 onwards
- Transforms, entropy coding and in-loop filters
- What changed inside H.264, HEVC and AV1
- Matched-quality comparison with PSNR, SSIM and VMAF

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