

Companion to article 3.10 of Block 3 (Codec Evolution). Print on A4 or US Letter.

AV2 in one paragraph - the open codec that succeeds AV1

AV2	AOMedia open video codec. Draft v13 published Jan 2026. Final spec target end of 2026.
Compression	~28-33% BD-rate reduction vs AV1 on PSNR-YUV and VMAF. Up to ~38% on 4K cinematic.
Architecture	Hybrid block-based. Up to 256x256 superblocks. New transforms IST/ATC/CCTX. SimNet CNN filter.
Licence	Royalty-free policy from AOMedia. Sisvel patent pool announced separately for device makers.
Reference encoder	AVM (AOM Video Model). 0.8-1.2 fps at 4K. Pilot-grade only in 2026.
Reference decoder	AVM + dav2d (VideoLAN). Real-time on consumer laptops in 2026.

Where AV2 sits vs AV1, VVC, and LCEVC

Codec	Royalty model	Bitrate vs AV1	HW decode mainstream
AV1	Royalty-free policy	baseline	2023
AV2	Royalty-free policy	~0.70x (-30%)	2028 to 2030
VVC	Multi-pool licences	~0.85x (-10-15%)	2027 to 2029
LCEVC	V-Nova per-device fee	layer; +20-40%	Software now

AV2 readiness - score 0 to 3 per row, total at the bottom

Question	0 - poor fit	3 - strong fit	Score
Audience share with AV2 HW decode	< 5%	>= 30%	_____
4K / 8K / VR content in catalogue	< 10%	>= 40%	_____
CDN egress > 5 PB / month	no	yes	_____
Encoding pipeline owns ladder code	third-party	in-house code	_____
Engineering capacity for 2027 pilot	< 0.25 FTE	>= 1 FTE	_____
Tolerance for software fallback	low	high	_____
Legal review of AV2 licensing done	no	yes	_____

Reading the score (out of 21)

0 to 7	Stay on AV1 in 2026 and 2027. Re-take this scorecard each year.
8 to 14	Plan a contained AV2 pilot for 2027 covering 4K, 8K, or VR catalogue only.
15 to 21	Build the AV2 production stack now. Target staged rollout from late 2028.

Key dates to remember

Jan 2026	AV2 draft v13 bitstream specification public.
Q4 2026	AOMedia target for AV2 final specification.
2027	First consumer SoC with hardware AV2 decode (PC GPU, flagship phones).
2028	Mid-range mobile and smart-TV adoption begins. Staged streaming rollouts.
2029-30	Mainstream traffic on AV2. Premium OTT once DRM ecosystem aligns.
2031+	AV2 becomes default codec. AV1 moves to fallback role.