

HEVC Advance Program Overview



December 2018

NOTICE: THE STRUCTURE OF THE HEVC ADVANCE LICENSING PROGRAM, INCLUDING THE TERMS HEVC ADVANCE IS CURRENTLY AUTHORIZED TO OFFER IN ITS PATENT PORTFOLIO LICENSE AGREEMENT, ARE SUBJECT TO REVIEW AND CHANGE UNTIL A LICENSE IS EXECUTED. ACCORDINGLY, THE CURRENT STATEMENTS ON THIS SITE AND THE TERMS IN THE EXEMPLAR DOCUMENTS AVAILABLE FOR DOWNLOAD SHOULD NOT BE RELIED UPON AS A GUARANTEE OF FUTURE TERMS OR CONDITIONS OF THE HEVC ADVANCE LICENSING PROGRAM OR THE TYPES OF ENTITIES TO WHOM HEVC ADVANCE OFFERS A LICENSE AND/OR REQUIRES TO BE LICENSED. THE ONLY WAY TO GUARANTEE CURRENTLY-STATED TERMS FOR YOUR COMPANY IS TO EXECUTE A LICENSE DURING THE PERIOD IN WHICH SUCH TERMS ARE AVAILABLE.

Agenda

1. Who is HEVC Advance
2. General Pool Terms
3. Royalty Rates and Structure

Who is HEVC Advance?

HEVC Advance is a best in class Patent Pool.

- Promote Adoption of HEVC/H.265
- License a pool of patents essential to HEVC/h.265 on Fair, Reasonable and Non-Discriminatory (FRAND) terms and conditions
- Provide rates that balance Licensor and Licensee Interests

We benefit from first hand experience creating, organizing, and managing other patent pools including MPEG LA, Via Licensing, and One Blue from their inceptions.

We assure conformance with worldwide laws applicable to patent pools.

HEVC Advance LLC

Headquartered at:

28 State Street
Suite 3202
Boston, MA 02109 USA

Japan Branch:

3-2 Marunouchi 2-chome
Yusen Building, LEVEL 1
Chiyoda-ku, Tokyo 100-0005

Sponsored by major corporate entities – but managed and operated as an independent Licensing Administrator on behalf of all Licensees and Licensors



HEVC Advance Licensors

See HEVC Advance website for up-to-date listing:

<http://www.hevcadvance.com/pdfnew/LicensorList.pdf>

HEVC Advance Licensees

See HEVC Advance website for up-to-date listing:

<http://www.hevcadvance.com/pdfnew/LicenseeList.pdf>

General Pool Terms

HEVC Advance Program – General Pool Terms

TOPIC: What Version of the HEVC Standard are included

- Our program includes **Versions 1 and 2** of ISO/IEC 23008-2 MPEG-H Part 2 and ITU-T Recommendation H.265 (“HEVC Standard”).
- **Version 1 includes:**
 - **Main/Main 10/Main Still**
- **Version 2 includes:**
 - **Advanced Profile Extensions (RExt, MV-HEVC and SHVC)**
- Features added in **Versions 3 and 4** of the HEVC Standard are being considered for addition to our program.

HEVC Advance Program – General Pool Terms

TOPIC: What Do We License - Devices

We license HEVC Decoders and Encoders in Consumer HEVC Products (**both** HEVC Products **for use by natural persons** and Commercial HEVC Authorized Products):

- Royalty rates based on three device categories:
 - Mobile Devices (e.g., Mobile Phone, Tablet, Laptop PC)
 - Connected Home and Other Devices (e.g., Set-Top Box, Game Console, Blu-ray Player, Desktop PC, non-4K UHD+ TV, Software, Surveillance Cameras, Conferencing Products, Medical Imaging, Digital Signage)
 - 4K UHD+ TVs
- Primary model is licensing HEVC decoders/encoders installed on devices at date of First Sale.
- Intent is to be paid once per device. Multiple HEVC encoders and/or decoders installed in a device prior to the device's First Sale incur **ONLY** a single royalty fee at the highest applicable rate upon the device's First Sale.

HEVC Advance Program – General Pool Terms

TOPIC: What Do We License – Commercial Content Distribution

We license Commercial HEVC Content stored on Physical Digital Media:

- HEVC Content on Physical Digital Media Storage (e.g., Blu-ray discs, other storage devices, etc.)
 - Box sets and bundled HEVC Content owe a separate royalty for each optical disc. For other digital media (i.e., video pack) that contains multiple Titles, a royalty is due for each Title.

HEVC Advance Program – General Pool Terms

TOPIC: What Do We NOT License

We do not license:

- “Commercial” products primarily used to create or distribute Commercial HEVC Content or provide cloud-based services.
- Non-physical HEVC content distribution (e.g., internet streaming, cable, over-the-air broadcast, and satellite).

HEVC Advance Program – General Pool Terms

TOPIC: How Are Patents Evaluated

HEVC Advance has retained Barceló, Harrison & Walker, LLP, a firm of patent law experts and engineers, as an Independent Patent Evaluator to provide global patent essentiality determinations. This Independent Patent Evaluator has engaged multiple patent law firms around the world to draw upon their international expertise as needed.

HEVC Advance Program – General Pool Terms

TOPIC: What Intellectual Property is Licensed

- Our License covers **all** of our Licensors' HEVC Standard essential claims a Licensee practices.
- Our Patent List identifies Licensor patents that include one or more claims found to be essential to the HEVC Standard by our Independent Patent Evaluator.
- All essential claims that a Licensee practices are included – even those essential claims in Licensor patents that have not yet been evaluated by our Independent Patent Evaluator.

HEVC Advance Program – General Pool Terms

TOPIC: Whom Do We License

- Consumer HEVC Products: Parties that Sell fully functional devices or software that incorporate one or more HEVC decoders and/or encoders to End Users for (i) personal use or (ii) in providing commercial services that do not involve encoding and/or decoding Commercial HEVC Content.
- Commercial Content Distribution: Parties that Sell (e.g., commercially distribute) HEVC Content on Physical Digital Media Storage (Blu-ray discs, other storage devices, etc.) to End Users for personal use
 - For HEVC Content on Physical Digital Media Storage, the content creator/studio is the primary Licensee. Replicators may be licensed on a case-by-case basis subject to HEVC Advance approval.

HEVC Advance Program – General Pool Terms

TOPIC: Where and When is a Royalty Due

- A royalty is due upon the Sale to an End User of a Consumer HEVC Product or HEVC Content on Digital Media Storage for which an HEVC Essential Patent (listed on HEVC Advance's patent list) is in force, in either the country of manufacture or the country of sale or distribution.
- If there are no patents in both the country of manufacture and the country of sale or distribution, then no royalties are due for Consumer HEVC Products or HEVC Content on Digital Media Storage distributed or sold to End Users in that country.

HEVC Advance Program – General Pool Terms

TOPIC: Royalty Rate Structure

- Geographic Rate Differentials: Stated rates apply to the country/territory in which the Consumer HEVC Product and HEVC Content on Digital Media Storage is first sold.
- Royalty reduction (50% discount) in which the First Sale is in Region 2 (an emerging market).
- Region Definitions:
 - Region 1 = U.S., EU, Japan, S. Korea, Australia, New Zealand, etc. See a complete list of countries/territories on the HEVC Advance website.
 - Region 2 = All countries/territories outside of Region 1.
- Royalty rates shown include separate and non-additive discounts for being In-Compliance and for using the HEVC Advance Trademark logo.
- Standard Rates (i.e., non-discounted rates) apply if Licensee is not In-Compliance.

HEVC Advance Program – General Pool Terms

TOPIC: Royalty Rate Structure, Continued

- Main, Main Still and Main 10 profiles are included in our ‘base rates’.
- Advanced Profiles (RExt, MV-HEVC, and SHVC) have a separate royalty rate structure with royalties due only if implemented.
- Optional Features (e.g., SEI messages) have a separate royalty rate structure. License available at the option of Licensee.
- Royalty Rate Term Increase Cap: Royalty rates and caps will not increase more than 20% for any Renewal Term.

HEVC Advance Program – General Pool Terms

TOPIC: Annual In-Compliance Royalty Caps

- Multiple Cap Categories (i.e., Mobile Devices, Connected Home and Other Devices, 4K UHD+ TV's, and HEVC Content on Digital Media Storage).
- Single Enterprise Cap for above noted Categories.
- Separate Category and Enterprise Caps for Optional Features.
- All caps apply to total royalties due on worldwide sales for a single enterprise (i.e., a Licensee and its Affiliates).
- Caps apply only during those quarterly reporting and payment periods in which a Licensee and its Affiliates are In-Compliance.
- All caps reset annually on Jan. 1 of each year.
- Standard Rates are not capped (i.e., royalties owed at Standard Rates do not accrue against any caps).

HEVC Advance Program – General Pool Terms

TOPIC: Annual Enterprise Credit

- Annual Enterprise Credit of \$25,000 applies to all Enterprises that owe royalties and are In-Compliance.
- The credit is provided in four equal quarterly installments of \$6,250 each.

HEVC Advance Program – General Pool Terms

TOPIC: Term of License

- Licenses will be offered in five (5) year non-terminable increments, under the same five-year term structure, regardless of when executed.
- The initial five-year term ends December 31, 2020 and the first five-year renewal term ends December 31, 2025.
- The initial five-year non-terminable term will be automatically renewed for an additional non-terminable five-year term, unless terminated by Licensee in the event there is a change to the PPL which has a material adverse impact on Licensee.

HEVC Advance Program – General Pool Terms

TOPIC: Patent Marking

- Patent marking is required for Consumer HEVC Products and HEVC Content on Digital Media Storage. A reference to the HEVC Advance website (in accordance with applicable legal requirements) is allowed.

HEVC Advance Program – General Pool Terms

TOPIC: HEVC Advance Logo

- Option available to include the HEVC Advance Logo on all Licensed Products or their physical device packaging in return for a 10% discount that is included in the published device royalty rates. Logo usage guidelines can be found on HEVC Advance website.



Royalty Rates and Structure

Royalty Rate Structure for Trademark Licensees In-Compliance, Effective January 1, 2018



Device Category and Examples	Selling Price	Per-Device Royalty ⁽¹⁾ Main Profiles	Advanced Profiles Royalty ⁽¹⁾ (Each)	Advanced Profiles Royalty ⁽¹⁾ (All Three)	Annual In-Compliance Device Category Caps ⁽²⁾	Annual In-Compliance Enterprise Credit and Cap ⁽²⁾
Mobile Devices: Mobile Phone, Tablet, Laptop	All price ranges	\$0.40/\$0.20	+\$0.10/\$0.05	+\$0.25/\$0.125	\$30MM \$20MM (If entity does not sell phones)	
Connected Home & Other Devices: <u>Consumer Products:</u> Set-Top Box, Game Console, Blu-ray Player, Desktop PC, non-4k UHD+ TV, HEVC Software <u>Authorized Commercial Products:</u> Surveillance Cameras, Conferencing Products, Medical Imaging, Digital Signage	Devices ≤\$80.00 ⁽³⁾	\$20 or less \$20.01-\$30.00 \$30.01-\$40.00 \$40.01-\$50.00 \$50.01-\$60.00 \$60.01-\$70.00 \$70.01-\$80.00	\$0.20/\$0.20 \$0.25/\$0.25 \$0.35/\$0.35 \$0.45/\$0.40 \$0.55/\$0.40 \$0.65/\$0.40 \$0.75/\$0.40	+\$0.10/\$0.05	+\$0.25/\$0.125	\$20MM
	Devices >\$80.00 ⁽⁴⁾ and All HEVC Software	\$0.80/\$0.40	+\$0.20/\$0.10			
4K UHD+ Televisions	All price ranges	\$1.20/\$0.60	+\$0.30/\$0.15	+\$0.75/\$0.375	\$20MM	
Digital Media Storage Blu-ray Discs, Other Storage Devices	All price ranges	<u>Per Disc/Title</u> \$.0225/\$.01125	\$0.00	\$0.00	\$2.5MM	

Annual Enterprise Cap
\$40 million

Annual Enterprise Credit
\$25,000

- (1) Royalties shown are Region 1/Region 2 Countries/Territories. Advanced Profiles means the three profile groups released under Version 2: (A) Multiview HEVC extensions (MV-HEVC), (B) Range extensions (Rext), and (C) Scalable HEVC extensions (SHVC).
- (2) Excludes HEVC Software.
- (3) Applies to all Devices with a Selling Price of \$80 or less, excluding HEVC Software. Discounts for Devices Sold in Region 1 Countries/Territories at a Selling Price from \$40.01 to \$80 are effective for Sales on or after 1/1/2018.
- (4) Includes Devices Sold in Region 1 Countries/Territories at a Selling Price from \$40.01 to \$80 for Sales before 1/1/2018.

Royalty Rate Structure for Licensees In-Compliance without Trademark Discount, Effective January 1, 2018



Device Category and Examples	Selling Price	Per-Device Royalty ⁽¹⁾ Main Profiles	Advanced Profiles Royalty ⁽¹⁾ (Each)	Advanced Profiles Royalty ⁽¹⁾ (All Three)	Annual In-Compliance Device Category Caps ⁽²⁾	Annual In-Compliance Enterprise Credit and Cap ⁽²⁾
Mobile Devices: Mobile Phone, Tablet, Laptop	All price ranges	\$0.444/\$0.222	+\$0.111/\$0.0556	+\$0.278/\$0.139	\$30MM \$20MM (If entity does not sell phones)	
Connected Home & Other Devices: <u>Consumer Products:</u> Set-Top Box, Game Console, Blu-ray Player, Desktop PC, non-4k UHD+ TV, HEVC Software <u>Authorized Commercial Products:</u> Surveillance Cameras, Conferencing Products, Medical Imaging, Digital Signage	Devices ≤\$80.00 ⁽³⁾	\$20 or less \$20.01-\$30.00 \$30.01-\$40.00 \$40.01-\$50.00 \$50.01-\$60.00 \$60.01-\$70.00 \$70.01-\$80.00	\$0.222/\$0.222 \$0.278/\$0.278 \$0.389/\$0.389 \$0.500/\$0.444 \$0.611/\$0.444 \$0.722/\$0.444 \$0.833/\$0.444	+\$0.111/0.0556	+\$0.278/\$0.139	\$20MM
	Devices >\$80.00 ⁽⁴⁾ and All HEVC Software	\$0.889/\$0.444	+\$0.222/\$0.111			
4K UHD+ Television	All price ranges	\$1.333/\$0.667	+\$0.333/\$0.167	+\$0.833/\$0.417	\$20MM	
Digital Media Storage Blu-ray Discs, Other Storage Devices	All price ranges	<u>Per Disc/Title</u> \$.025/\$.0125	\$0.00	\$0.00	\$2.5MM	<u>Annual Enterprise Cap</u> \$40 million <u>Annual Enterprise Credit</u> \$25,000

(1) Royalties shown are Region 1/Region 2 Countries/Territories. Advanced Profiles means the three profile groups released under Version 2: (A) Multiview HEVC extensions (MV-HEVC), (B) Range extensions (Rext), and (C) Scalable HEVC extensions (SHVC).

(2) Excludes HEVC Software.

(3) Applies to all Devices with a Selling Price of \$80 or less, excluding HEVC Software. Discounts for Devices Sold in Region 1 Countries/Territories at a Selling Price from \$40.01 to \$80 are effective for Sales on or after 1/1/2018.

(4) Includes Devices Sold in Region 1 Countries/Territories at a Selling Price from \$40.01 to \$80 for Sales before 1/1/2018.

Standard Royalty Rate Structure, Effective January 1, 2018



Device Category and Examples	Selling Price	Per-Device Royalty ⁽¹⁾ Main Profiles	Advanced Profiles Royalty ⁽¹⁾ (Each)	Advanced Profiles Royalty ⁽¹⁾ (All Three)	Device Category Caps ⁽²⁾	Enterprise Credit and Cap ⁽²⁾
Mobile Devices: Mobile Phone, Tablet, Laptop	All price ranges	\$0.533/\$0.267	+\$0.133/\$0.0667	+\$0.333/\$0.167	No Cap applies.	
Connected Home & Other Devices: <u>Consumer Products:</u> Set-Top Box, Game Console, Blu-ray Player, Desktop PC, non-4k UHD+ TV, HEVC Software <u>Authorized Commercial Products:</u> Surveillance Cameras, Conferencing Products, Medical Imaging, Digital Signage	Devices ≤\$80.00 ⁽³⁾		+\$0.133/0.0667	+\$0.333/\$0.167	No Cap applies	No Annual Enterprise Credit No Cap applies
	\$20 or less	\$0.267/\$0.267				
	\$20.01-\$30.00	\$0.333/\$0.333				
	\$30.01-\$40.00	\$0.467/\$0.467				
	\$40.01-\$50.00	\$0.600/\$0.533				
	\$50.01-\$60.00	\$0.733/\$0.533				
	\$60.01-\$70.00	\$0.867/\$0.533				
	\$70.01-\$80.00	\$1.000/\$0.533				
	Devices >\$80.00 ⁽⁴⁾ and All HEVC Software	\$1.067/\$0.533	+\$0.267/\$0.133	+\$0.667/\$0.333		
4K UHD+ Television	All price ranges	\$1.60/\$0.80	+\$0.40/\$0.20	+\$1.00/\$0.50	No Cap applies	
Digital Media Storage Blu-ray Discs, Other Storage Devices	All price ranges	<u>Per Disc/Title</u> \$0.03/\$0.015	\$0.00	\$0.00	No Cap applies	

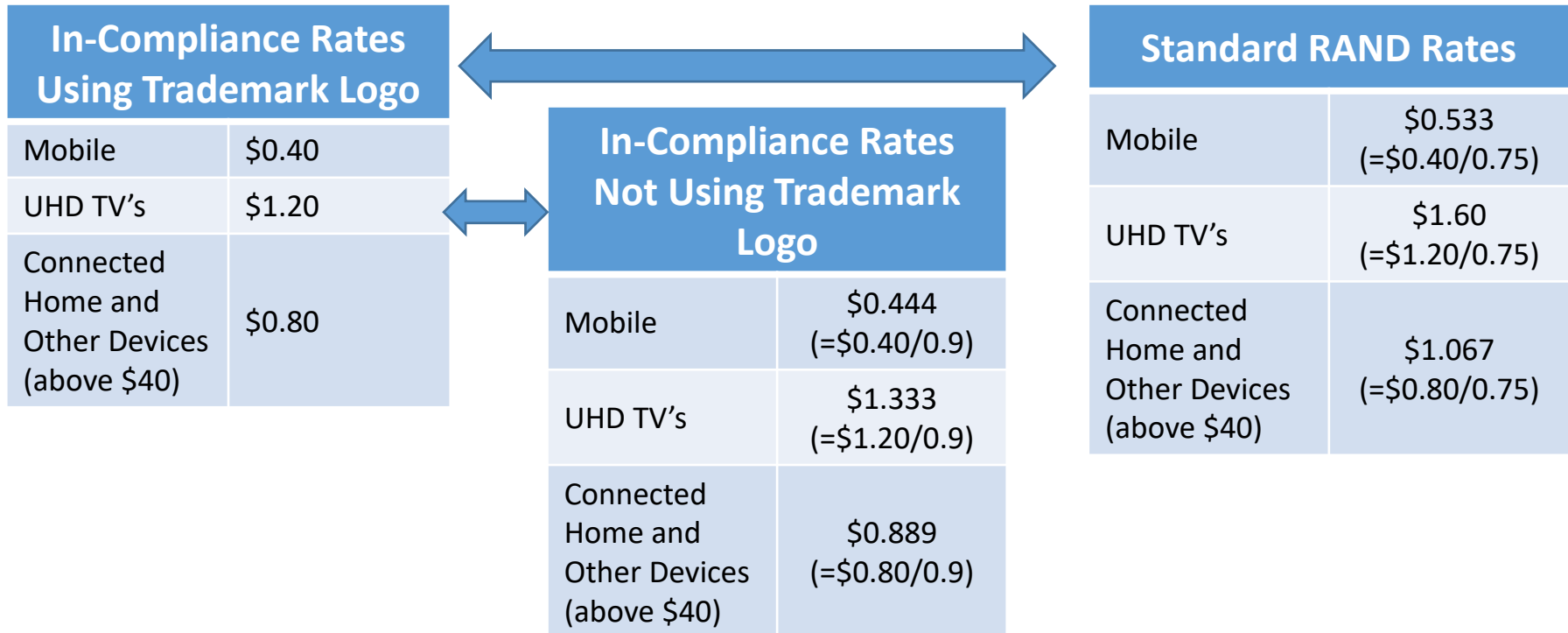
(1) Royalties shown are Region 1/Region 2 Countries/Territories. Advanced Profiles means the three profile groups released under Version 2: (A) Multiview HEVC extensions (MV-HEVC), (B) Range extensions (Rext), and (C) Scalable HEVC extensions (SHVC).

(2) Excludes HEVC Software.

(3) Applies to all Devices with a Selling Price of \$80 or less, excluding HEVC Software. Discounts for Devices Sold in Region 1 Countries/Territories at a Selling Price from \$40.01 to \$80 are effective for Sales on or after 1/1/2018.

(4) Includes Devices Sold in Region 1 Countries/Territories at a Selling Price from \$40.01 to \$80 for Sales before 1/1/2018.

Illustrative Royalty Rate Calculations – Region 1



Notes:

1. Region 2 Rates are half of Region 1 Rates, except for Connected Home and Other Devices sold at \$80 or less
2. In-Compliance Rates are capped and Standard Rates are uncapped

HEVC Advance Royalty Summary – Optional Features

Device Type	Optional Features Pricing (Region 1/ 2)	Annual Category Caps	Annual Optional Features Enterprise Cap
Mobile Devices	\$0.04/\$0.02	\$1MM	\$2MM
Connected Home and Other Devices	\$0.04/\$0.02	\$1MM	
4K UHD+ Television	\$0.08/\$0.04	\$1MM	

Notes - Optional Features Licensing

- The HEVC Optional Features license for Essential Patents is an optional addendum to the HEVC Advance Patent Portfolio License.
- For Optional Features, HEVC Advance licenses “Essential Patents on Optional Features” which means any patent claim covering a feature described in the HEVC Standard which is not required to be implemented in an HEVC Product, but, if the feature is implemented, must be implemented within the scope of the HEVC Standard and necessarily or unavoidably infringe such patent claim.
- Fees are in addition to any other royalties due for HEVC products or content distribution.
- Caps on Optional Feature royalties are separate from and not additive with any other caps.
- Fees for HEVC Content on Digital Media Storage encoded with Optional Features are waived under the Optional Features License. To obtain the waiver, the Optional Features License must be executed.

In-Compliance License Signing and Incentive Program Guidelines – Effective as of January 1, 2018

- HEVC Advance offers an incentive program for the initial five-year term. This program is available to enterprises that execute a HEVC Advance Patent Portfolio License Agreement within 12 months following the date of First Sale of a Consumer HEVC Product or HEVC Content on Digital Media Storage.
- This Program has 2 parts:
 - In-Compliance License Signing Discount with Capped Royalties. This program offers a substantial Royalty Rate discount and annual Caps for Consumer HEVC Products and HEVC Content on Digital Media Storage Sold prior to License Agreement execution (“Past Sales”).
 - As shown in the following summary, the amount of discount varies depending upon how quickly the enterprise executes a HEVC Patent Portfolio License Agreement, and
 - Ongoing 10% Royalty Discount. This program offers a 10% discount during the first five-year License Agreement term for Consumer HEVC Products (subject to certain exclusions) and HEVC Content on Digital Media Storage Sold after License Agreement execution.

In-Compliance License Signing and Incentive Program Guidelines – Effective as of January 1, 2018, continued

- After the 12 month period, unless the Licensing Administrator extends the Incentive Period at its sole discretion, the Licensee Incentive Program will no longer be available and Standard Rates (without Caps) shall apply for all Past Sales and no discount will be available on sales from License Execution Date through the period ending December 31, 2020.

Incentive Program Summary – Effective as of January 1, 2018

	License Execution Period	Discount and Cap availability on Sales made prior to License Execution (1,2)	Discount granted on future sales from License execution thru 12/31/2020 (2,3)
Start Date	Date of First Sale		
Period 1 Analysis/License Phase	Initial 6 months/2 Quarters	50% Caps Apply	10% Caps Apply
Period 2 License Phase	After Period 1 but within 9 months/3 Quarters	35% Caps Apply	10% Caps Apply
Period 3 License Phase	After Period 2 but within 12 months/4 Quarters	20% Caps Apply	10% Caps Apply
After Period 3	After 12 months/4 Quarters	0% (No Discount) No Caps Standard Rates Apply	0% (No Discount) Caps Apply

- (1) Discount from "In-Compliance" Rates.
- (2) Discounts do not apply to Lower-Priced Devices covered under the Connected Home and Other Devices Category that are sold at or under \$80 per unit.
- (3) In-Compliance Royalty Rates, Caps and 10% discount apply for future sales, providing Licensee is In-Compliance. Otherwise, Standard Rates apply with no 10% discount.

 Thank You.

28 State Street, Suite 3202, Boston, MA 02109 USA | +1 617.367.4802 | www.hevcadvance.com

This material is a brief high-level summary and overview of certain terms for information purposes only and does not create any contract or agreement. The actual terms are those contained in the HEVC Patent Portfolio License. This summary is subject to change at any time at the discretion of HEVC Advance.

© 2018 HEVC Advance. All Rights Reserved