

1Q 2023

Company Overview

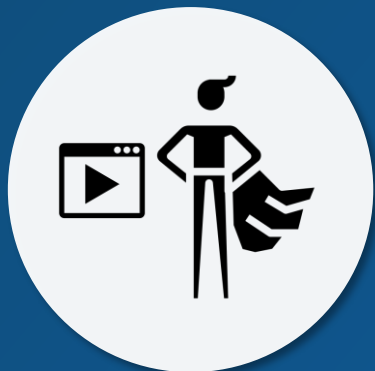
Chips&Media

Contents

Company Introduction

C&M Business

Product Overview



Video IP Leader

Worldwide Video IP Leader

C&M has more than 150+ worldwide licensees with global top-tier semi-conductor manufacturers.

Leading Semiconductor Video IP

C&M is the leading company to develop a world first AV1 and HEVC multi-standard codec IP.



Media Solution

Multimedia IP Portfolio

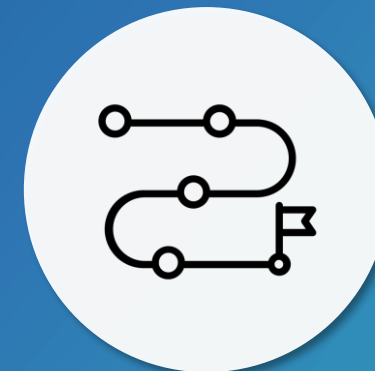
- Video codec IP
- Image codec IP
- Image signal processing IP



Benefits

Features

- High-performance
- Small size
- Low power consumption
- High-quality



Future

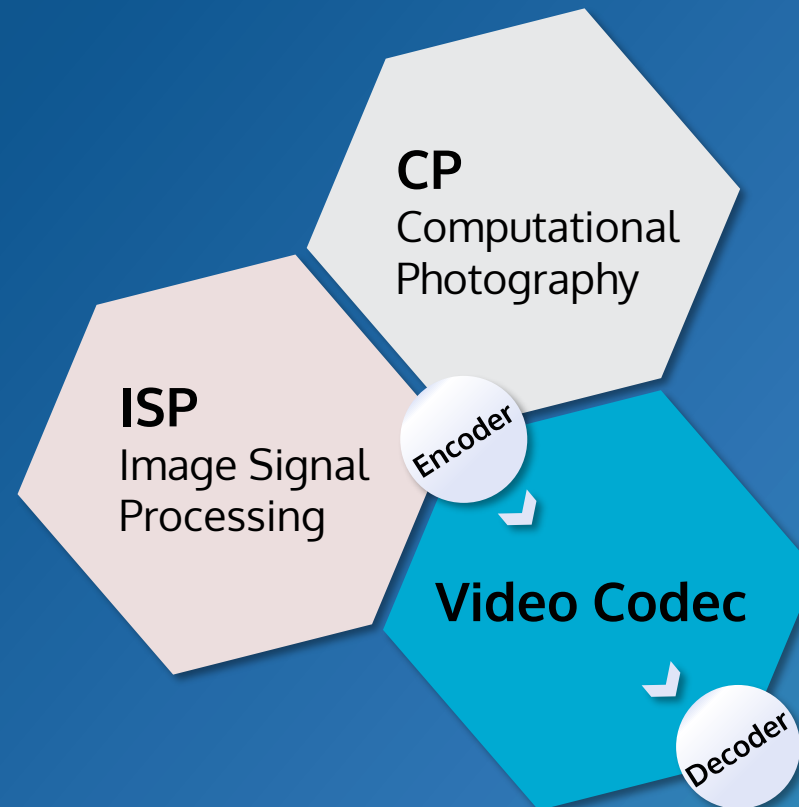
Market Leader

- AV1 and VVC codec IP

38% R&D Investment in the past Three-years

- Y'19(40%)
- Y'20(42%)
- Y'21 (33%)

C&M is a global leader in silicon HW IP and delivers a wide range of multimedia IP. This range includes video codecs and image signal processors.



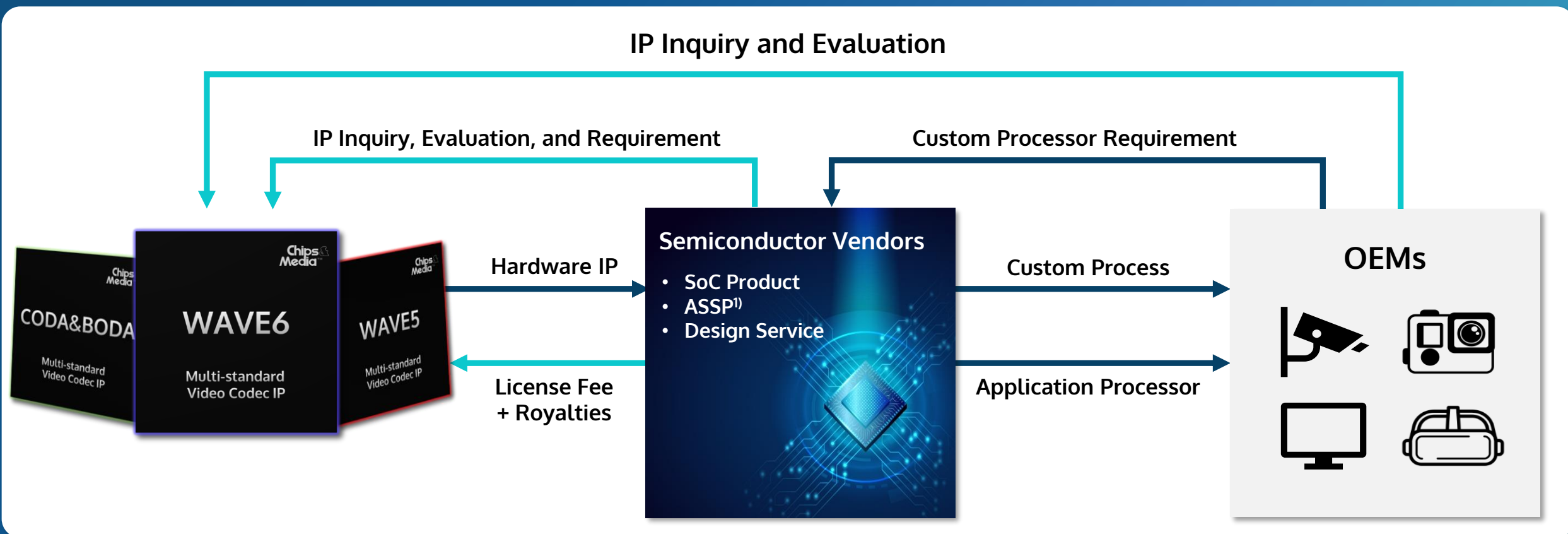
License and Royalty

The use of IP

- Single use of IP
- Multiple uses of IP for a period of years

Running royalties

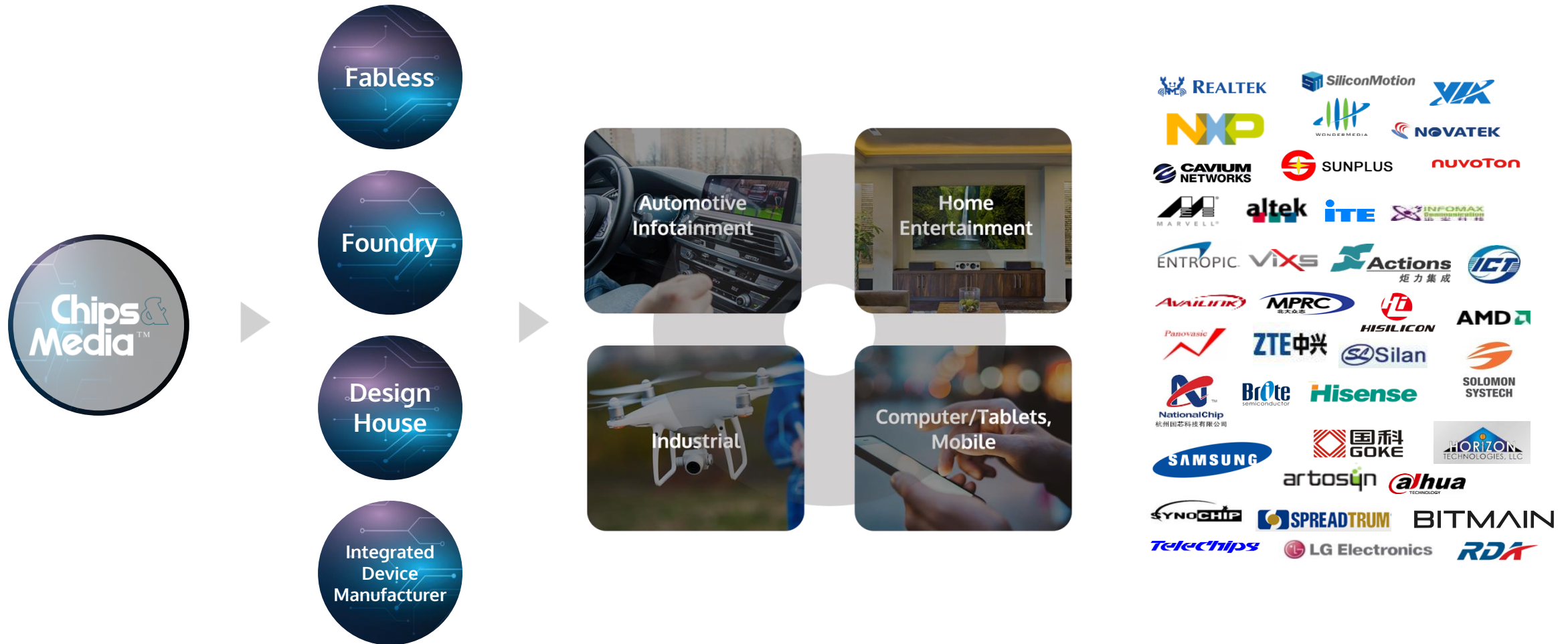
- Tiered royalty rates: Rate changes according to chip sales (Royalty rate decreases when chip sales increase)

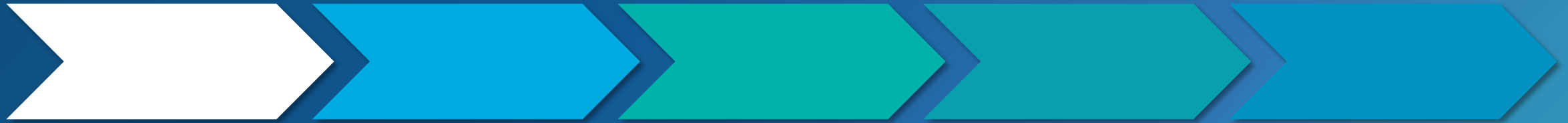


¹⁾ Application Specific Standard Product (ASSP)

Business Value Chain

C&M has more than 150+ worldwide licensees, including global top-tier semiconductor manufacturers.





2003

Founded Chips&Media, inc.

2004

Signed contract with MtekVision Co. to license MPEG-4 IP

2005

Licensed multi-standard video codecs to global companies

2015

Listed in KOSDAQ

2021

Exceeded the accumulated shipment of 1 billion semiconductors powered by Chips&Media video technology

Product Overview

Video Codec IP

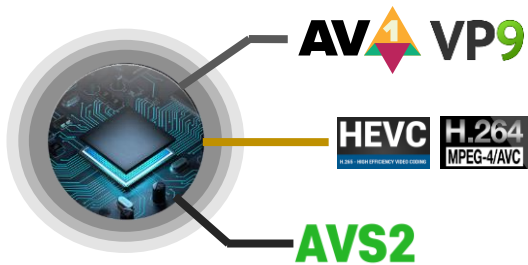
- Multi-standard video codecs
- HEVC, H264, AV1, VP9, AVS2, and legacy

Image Signal Processor IP

- 2MP, 5MP, 8MP, and 13MP ISP
- 3D noise reduction and high dynamic range

C&M Video Codec HW IP Lineup

CODA/BODA and WAVE5/6 series are video codec IPs that support multi-standard video codecs with an optimized competitive PPA (Power, Performance, and Area).



C&M Video HW IP

	CODA/BODA	WAVE5	WAVE6
Supported Standards of Encoder	AVC/H.264, MPEG-4, and H.263	HEVC/H.265 and AVC/H.264	AV1, HEVC/H.265, and AVC/H.264
Supported Standards of Decoder	AVC/H.264, MPEG-4, H.263, and other legacy	AV1, HEVC/H.265, AVC/H.264, VP9, and AVS2	AV1, HEVC/H.265, AVC/H.264, and VP9
Target Performance	2K60fps@266MHz	4K60fps@500MHz or 8K60fps@1GHz	4K60fps@500MHz or 8K60fps@1GHz



Surveillance and STB



Drones and Robotics



Automotive



AR/MR/VR



Mobile and Tablet



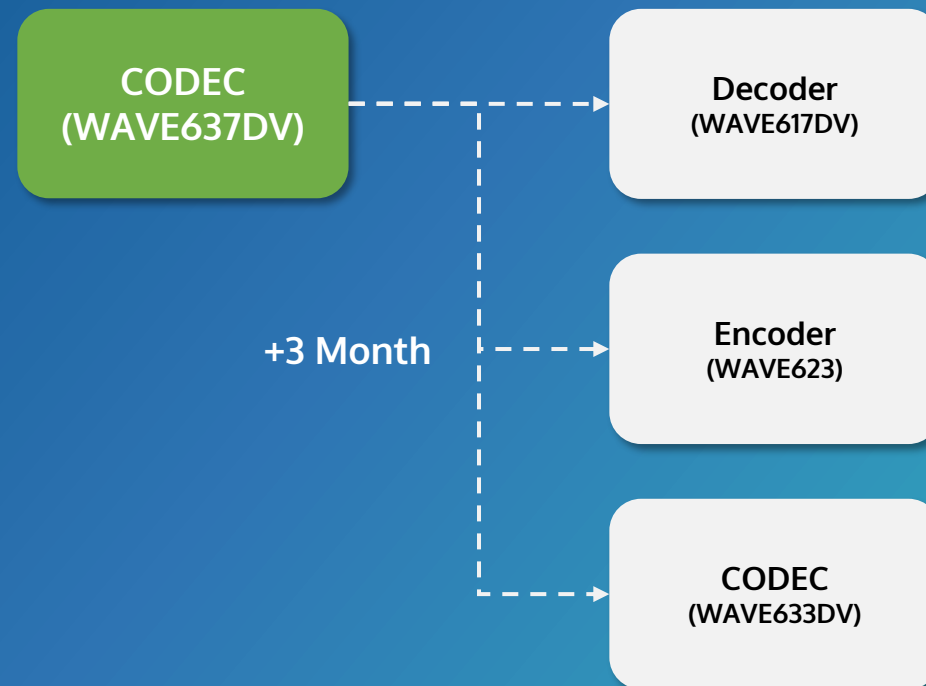
Home Entertainment

WAVE6 Series Lineup

Codec IP	Ready	AV1	HEVC	AVC	VP9
Single-core					
WAVE637DV	Available	O	O	O	O
WAVE633LC	Available		O	O	
WAVE633	Available		O	O	
WAVE737DV	2H, Y24	O	O	O	O
Dual-core					
WAVE677DV	Available	O	O	O	O
WAVE677DV PX4	1H, Y23	O	O	O	O
WAVE673	Available		O	O	

Encoder IP	Ready	AV1	HEVC	AVC
Single-core				
WAVE624	Available	O		
WAVE627LC	Available	O	O	O
WAVE627	Available	O	O	O
WAVE627 PX4	1H, Y23	O	O	O
WAVE623 Gen2	2H, Y23		O	O
Dual-core				
WAVE663	Available		O	O
WAVE663 Gen2	1H, Y24		O	O

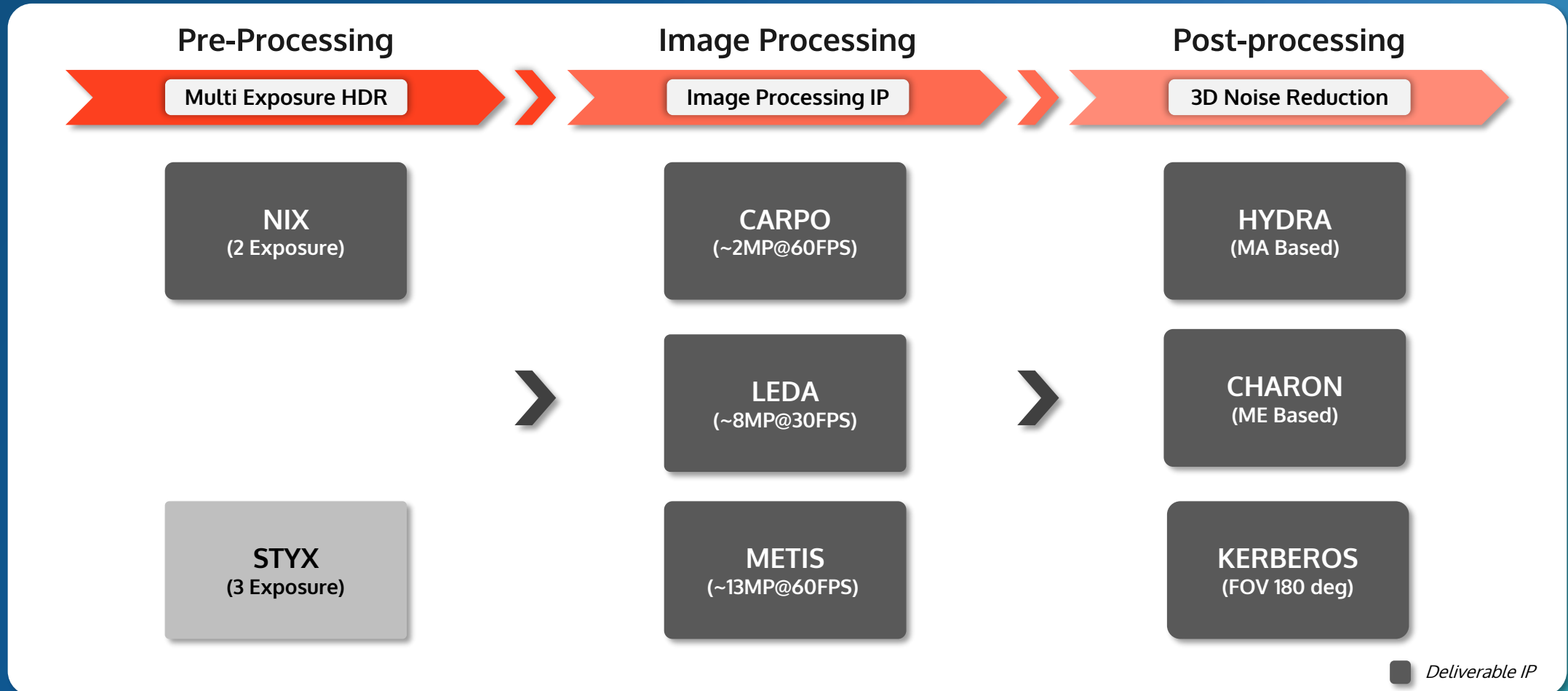
Configurable IP (example)



Decoder IP	Ready	AV1	HEVC	AVC	VP9	VVC
Single-core						
WAVE617DV	On-demand	O	O	O	O	

A Wide Range of Image Signal Processor IP

Image Signal Processor (ISP) HW IPs support pre-processing, image processing, and post-processing. ISP HW IPs convert image signals into a better visible and processable format for multimedia processing.



THANK YOU

Marketing@chipsnmedia.com
Tel) +82.2.568.3767

Visit www.chipsnmedia.com
for more information