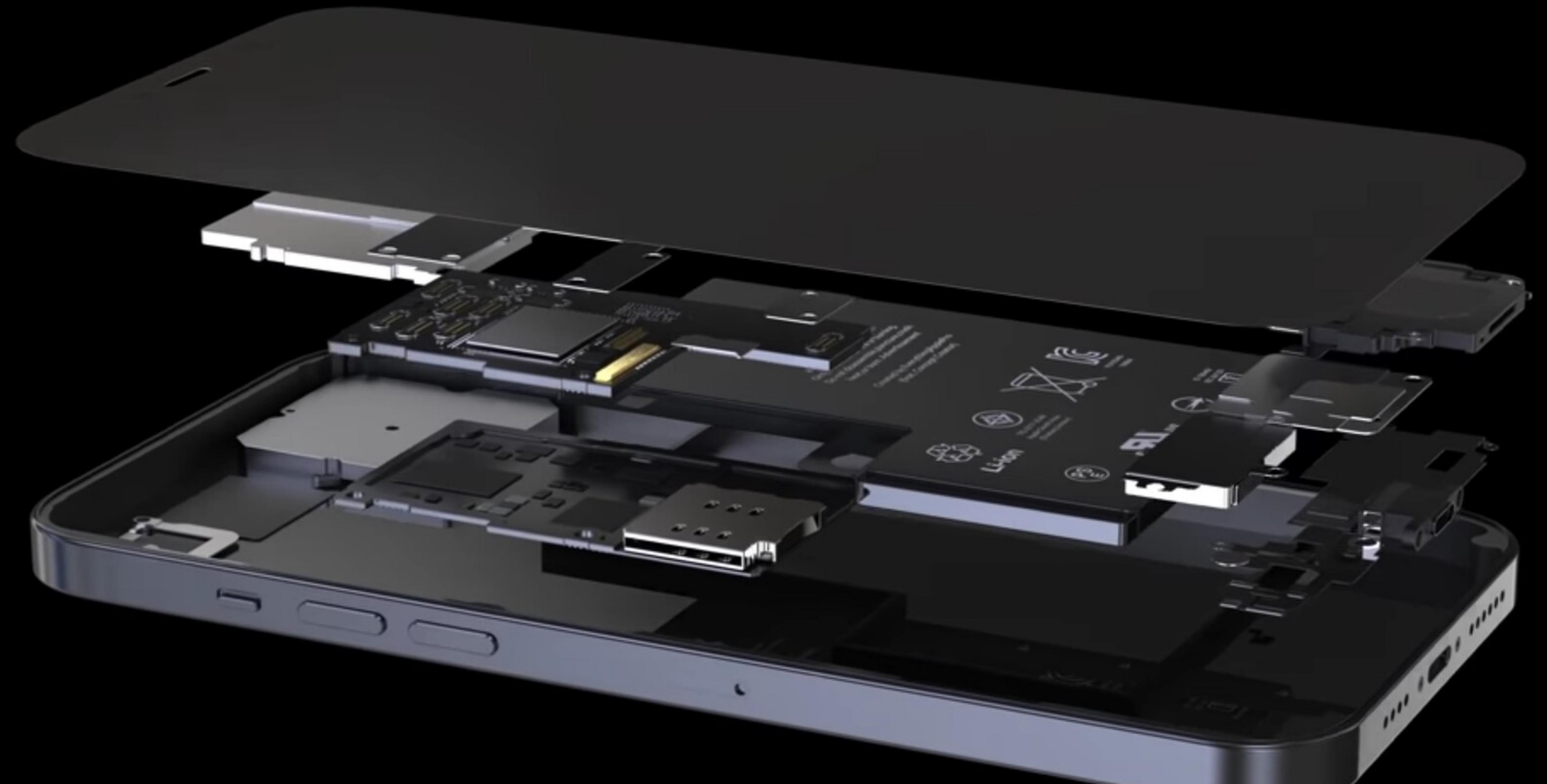


iPhone 12

Radiografía

Marduk Pérez de Lara



Temas

- Materiales
- Tamaño
- Pantalla
- 5G
- Procesamiento
- Camaras
- Carga
- Sensores





MATERIALES



11% thinner
15% smaller
16% lighter

4X

Better drop performance

Number in inches

8

7

6

5

4

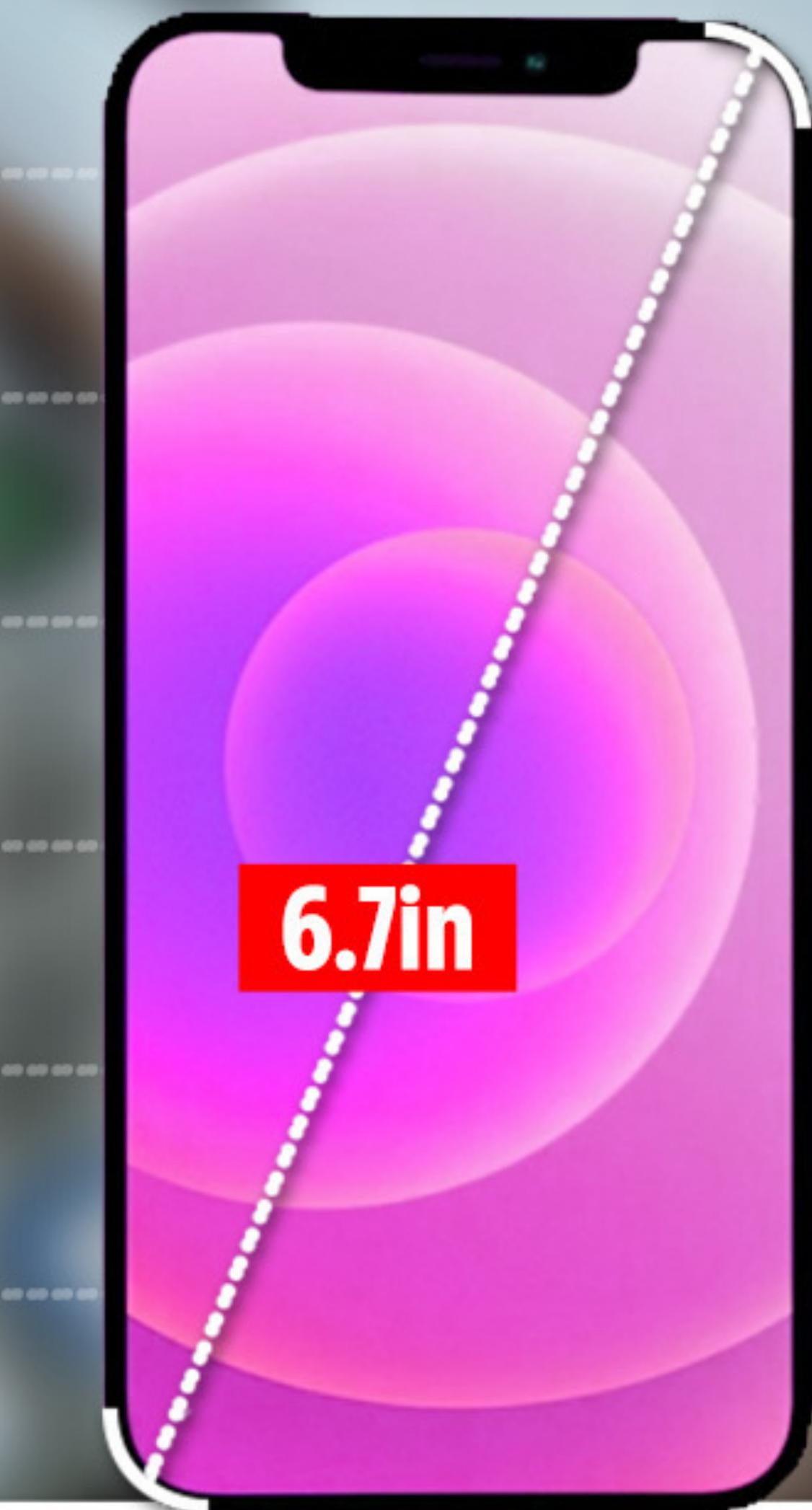
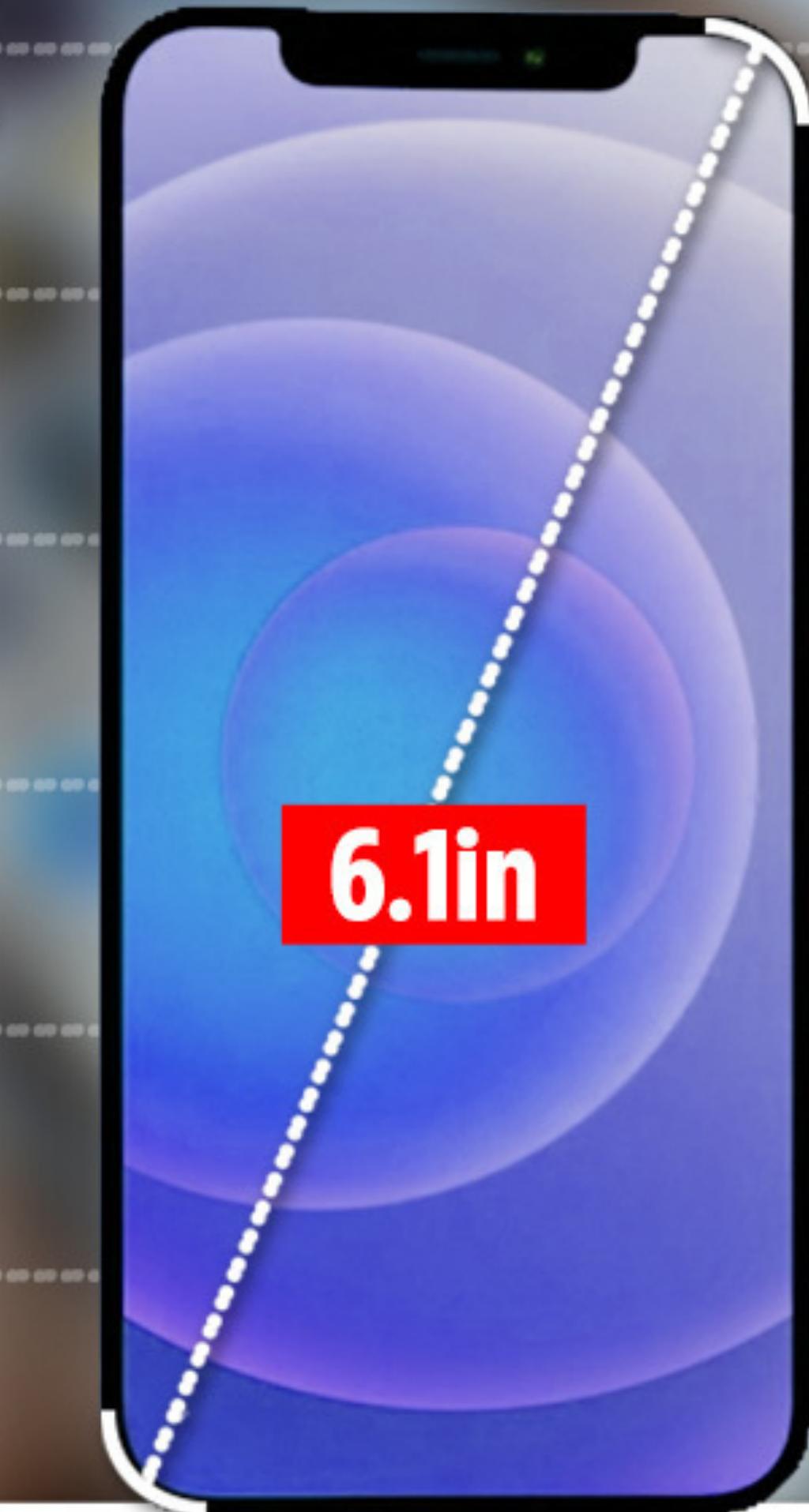
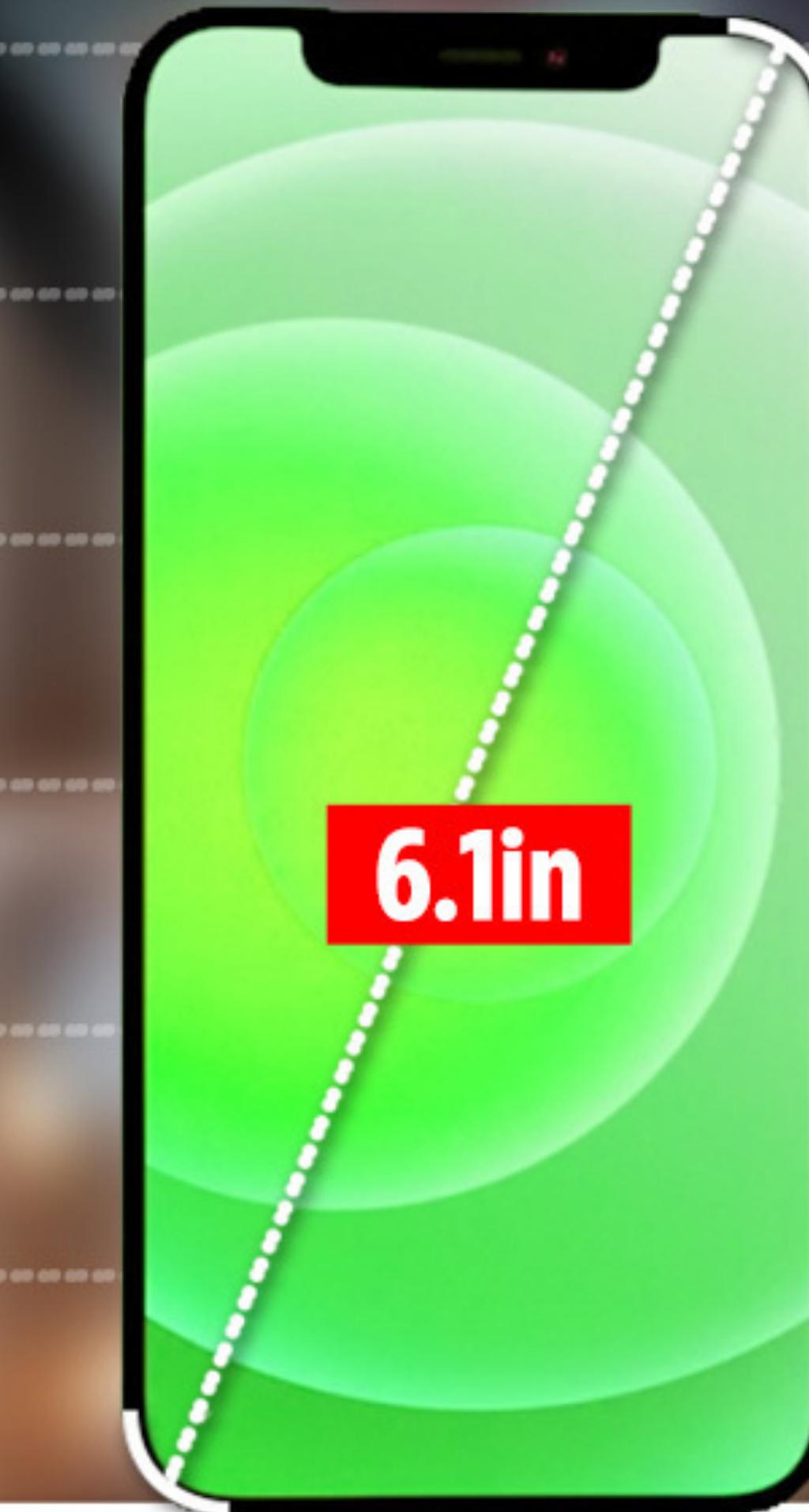
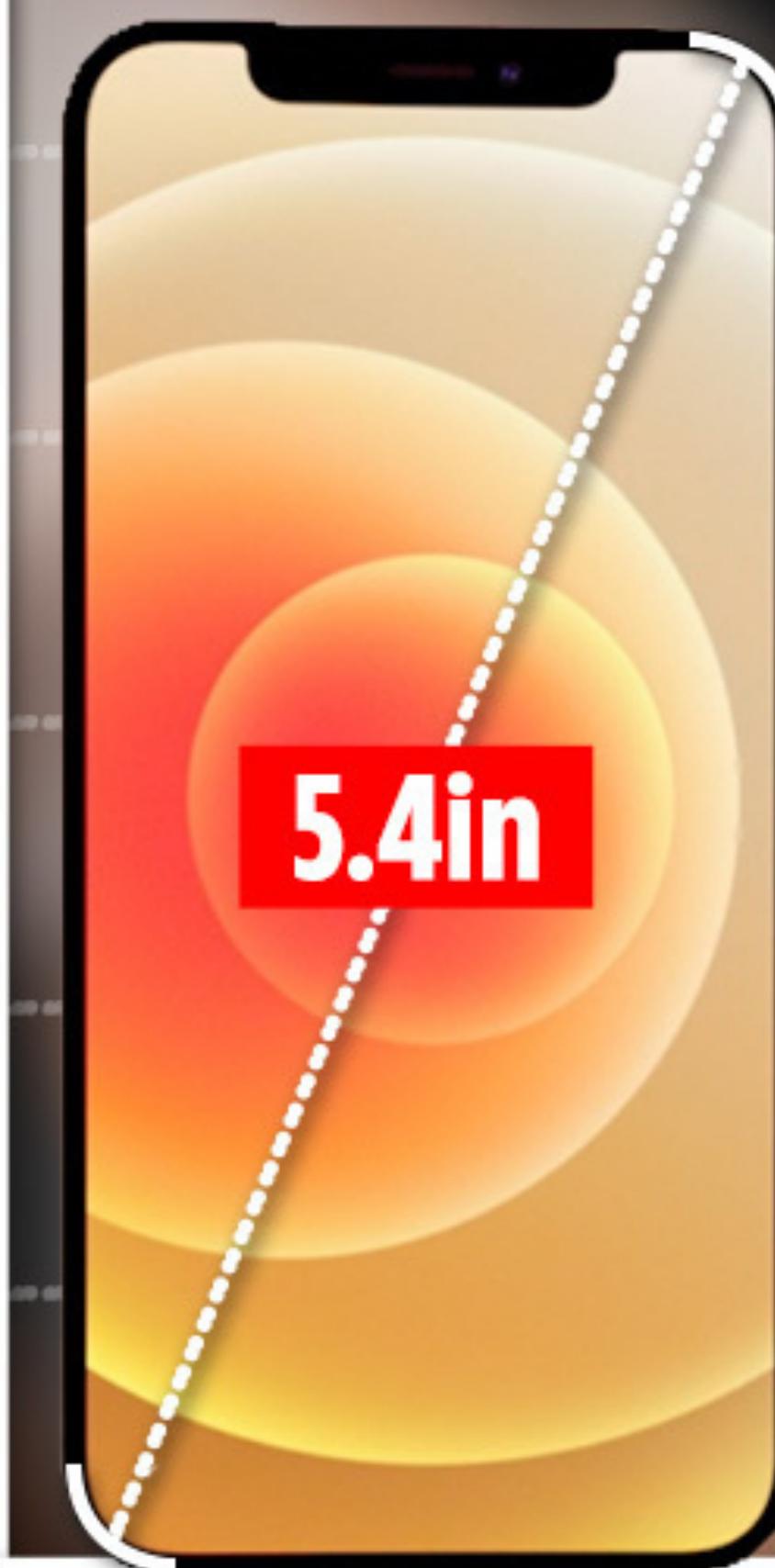
3

2

1

0

TAMAÑO

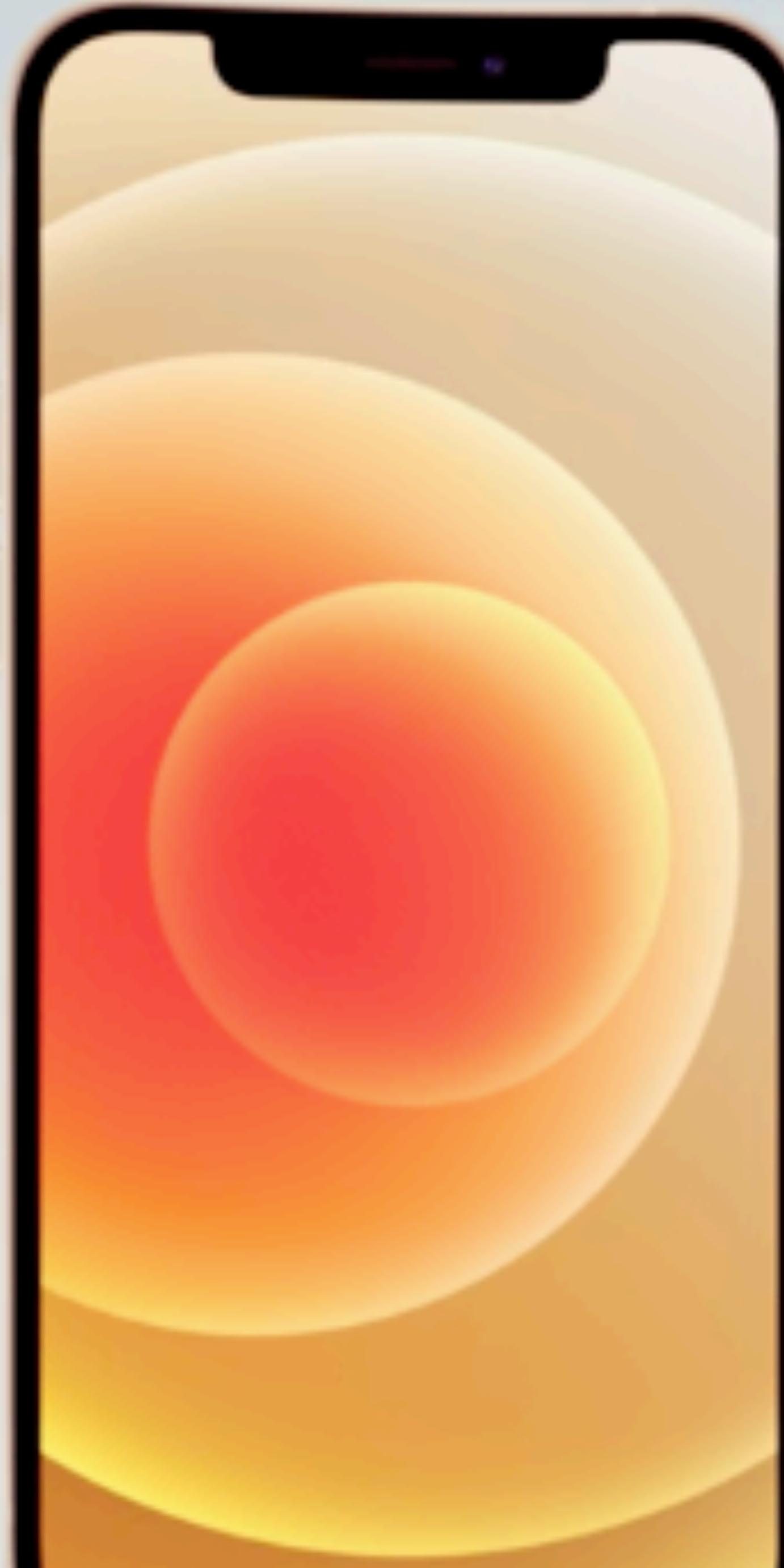


iPhone 12

iPhone 12

iPhone 12

iPhone 12



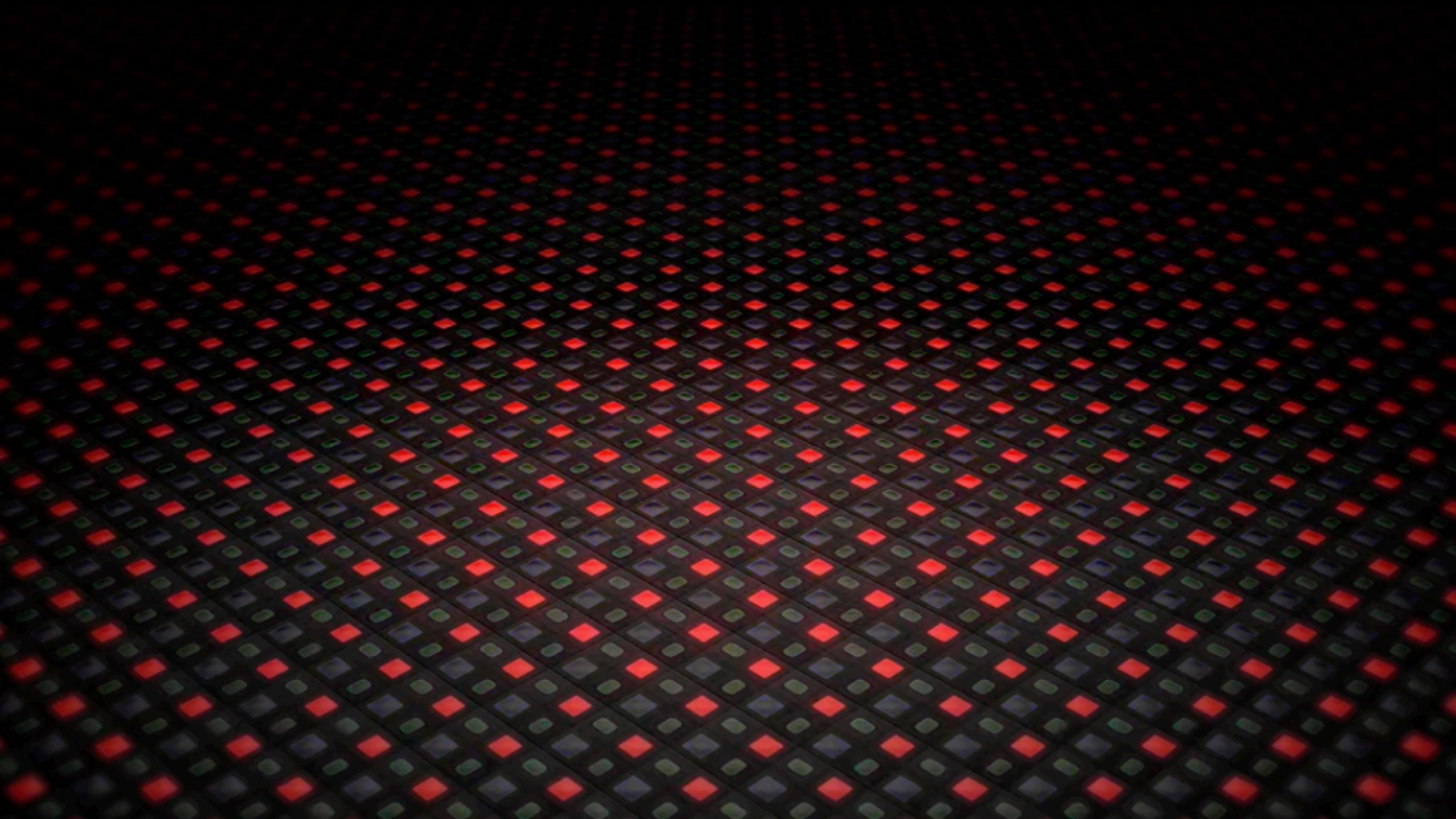
PANTALLA

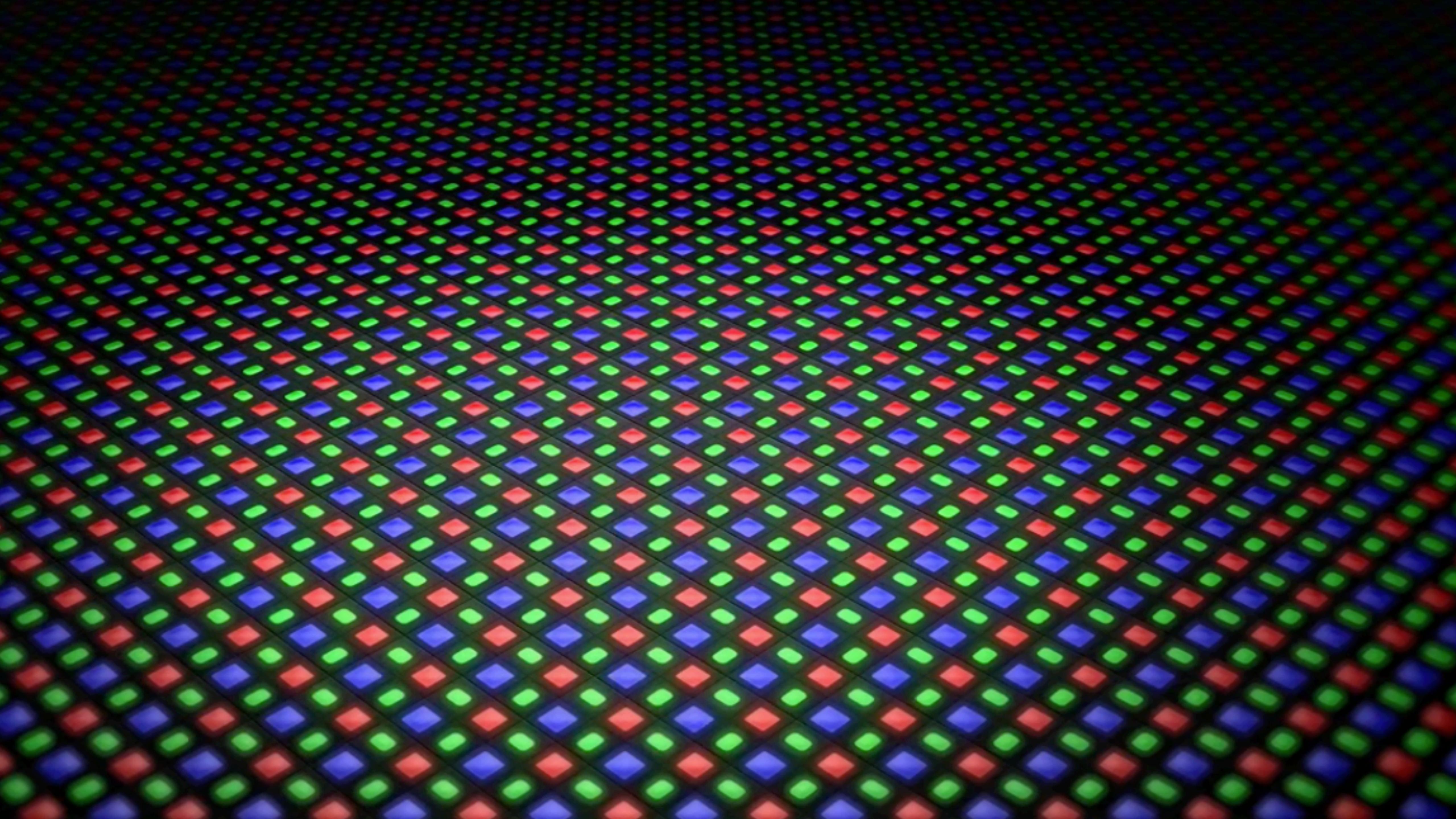
2X
more pixels
than iPhone 11

2,000,000:1



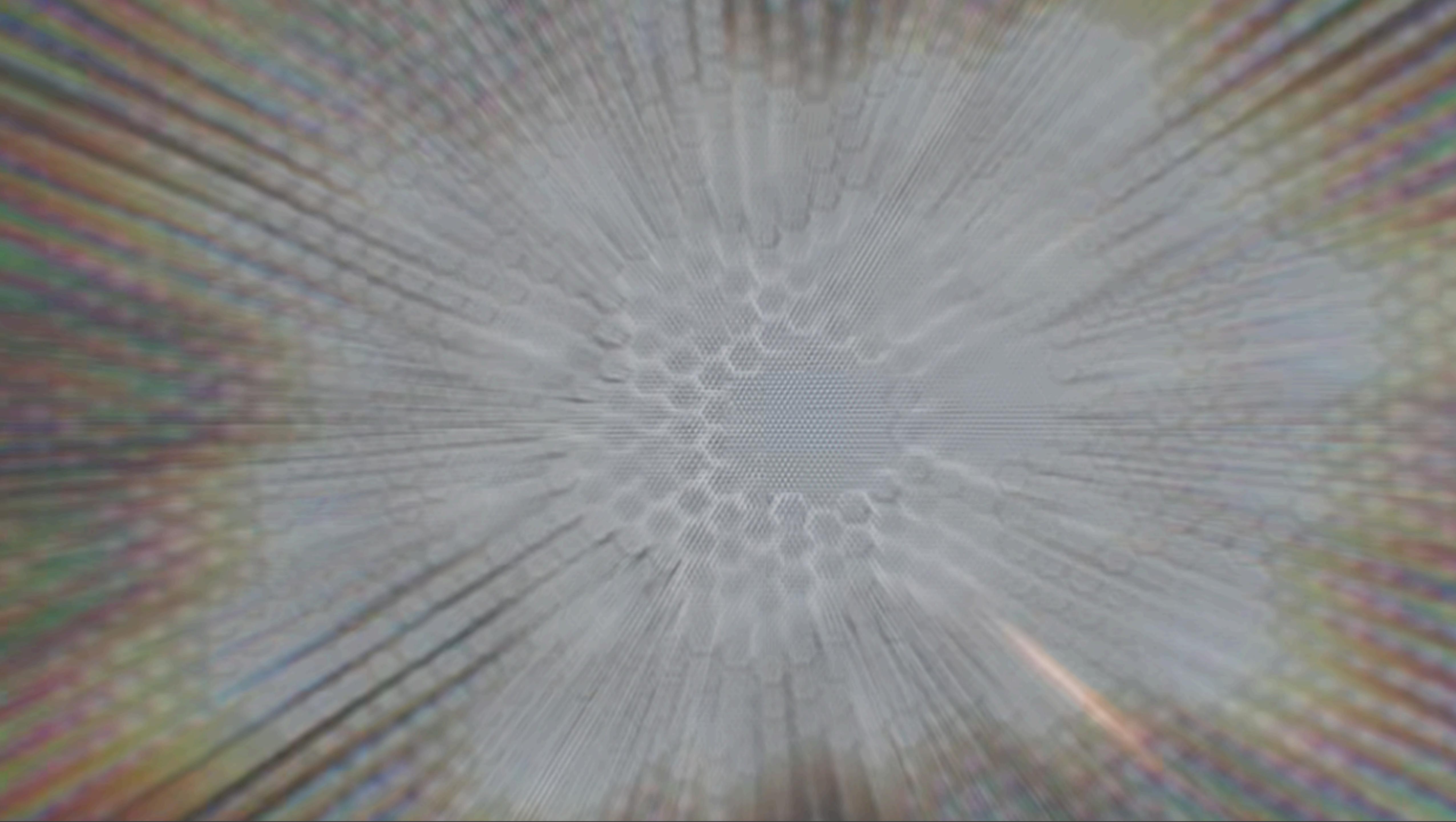
contrast ratio



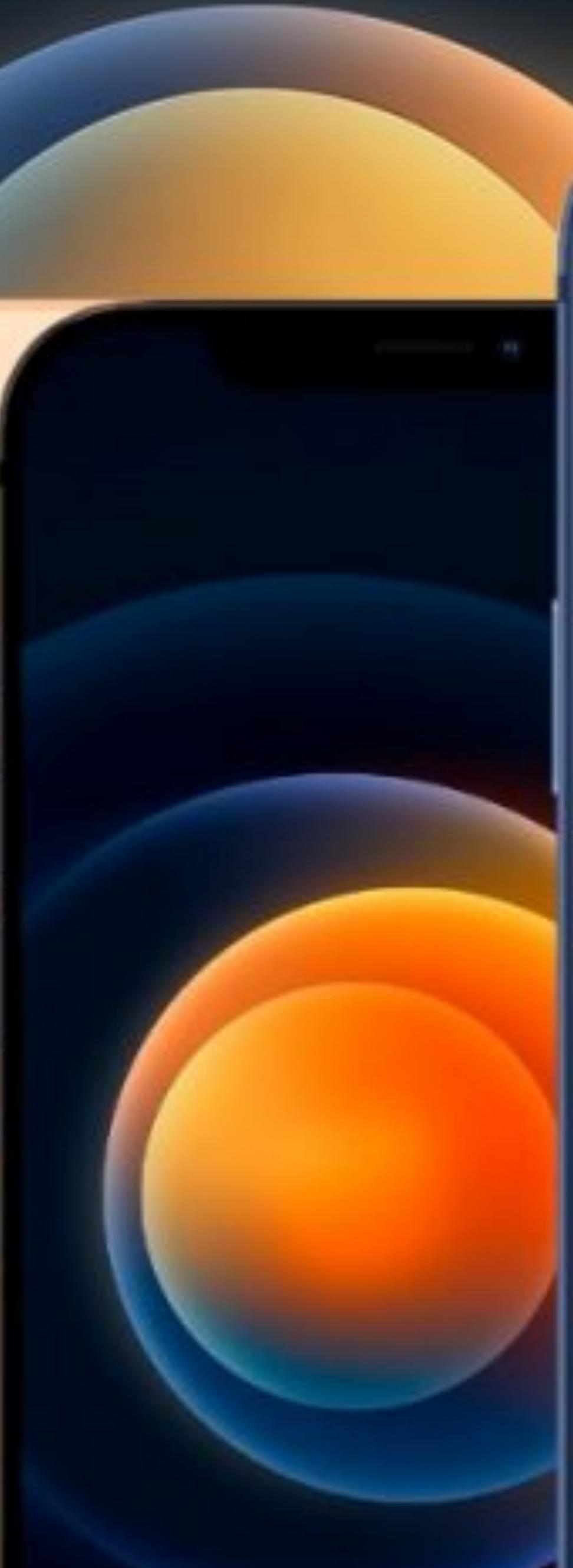
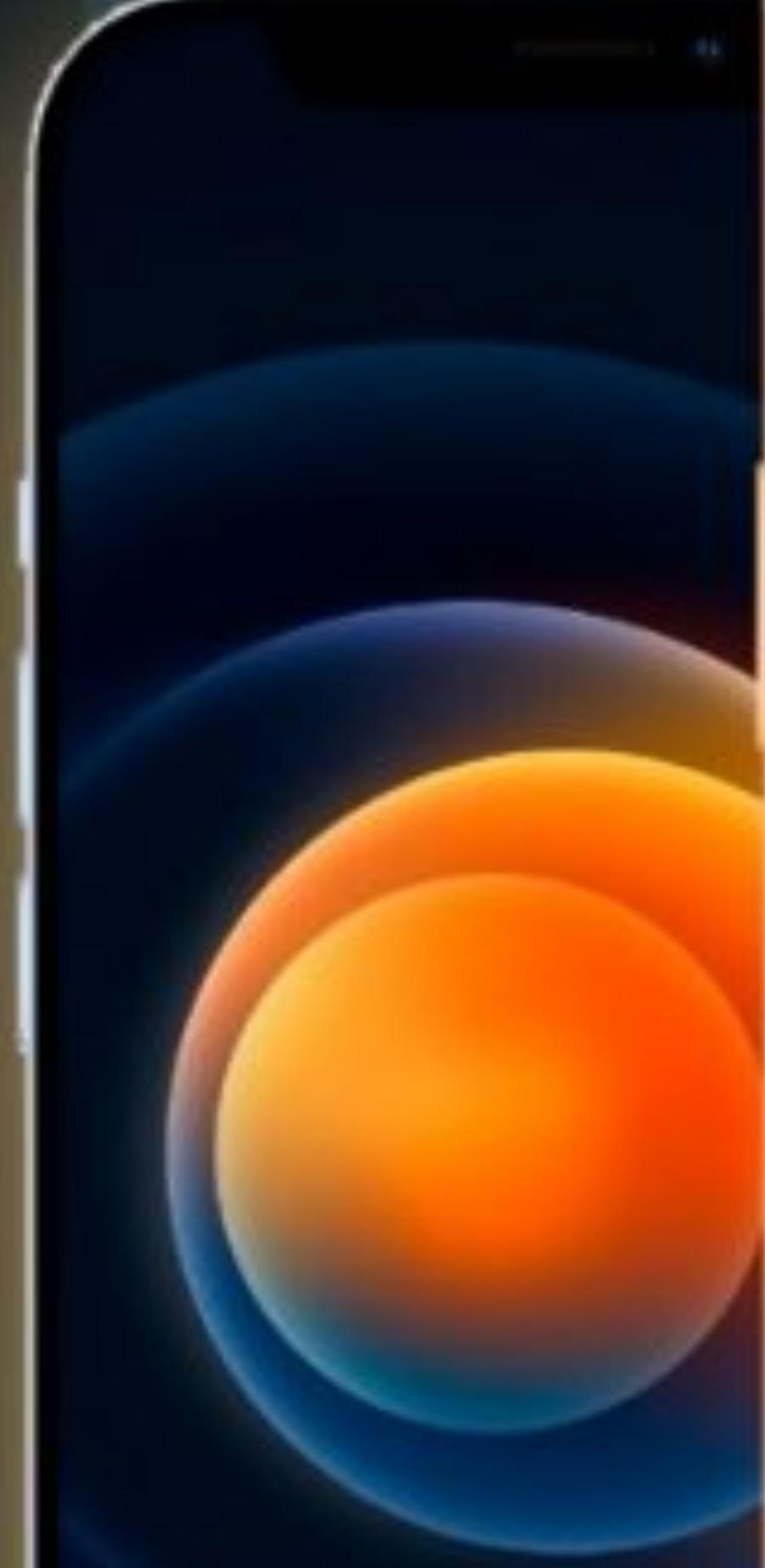


	iPhone 12	iPhone 12 Max	iPhone 12 Pro	iPhone 12 Pro Max
Panel Size	5.4"	6.1"	6.1"	6.7"
Resolution	2340 x 1080	2532 x 1170	2532 x 1170	2778 x 1284
PPI	475	460	460	458
Panel Supplier	Samsung Display	BOE/LG Display	Samsung Display	Samsung Display
Touch Film	Integrated	Add-on	Add-on	Integrated
Bits of Color	8	8	10	10

Ceramic Shield



5G



hardware + software + proveedores de servicio



Antenas

Capas

App

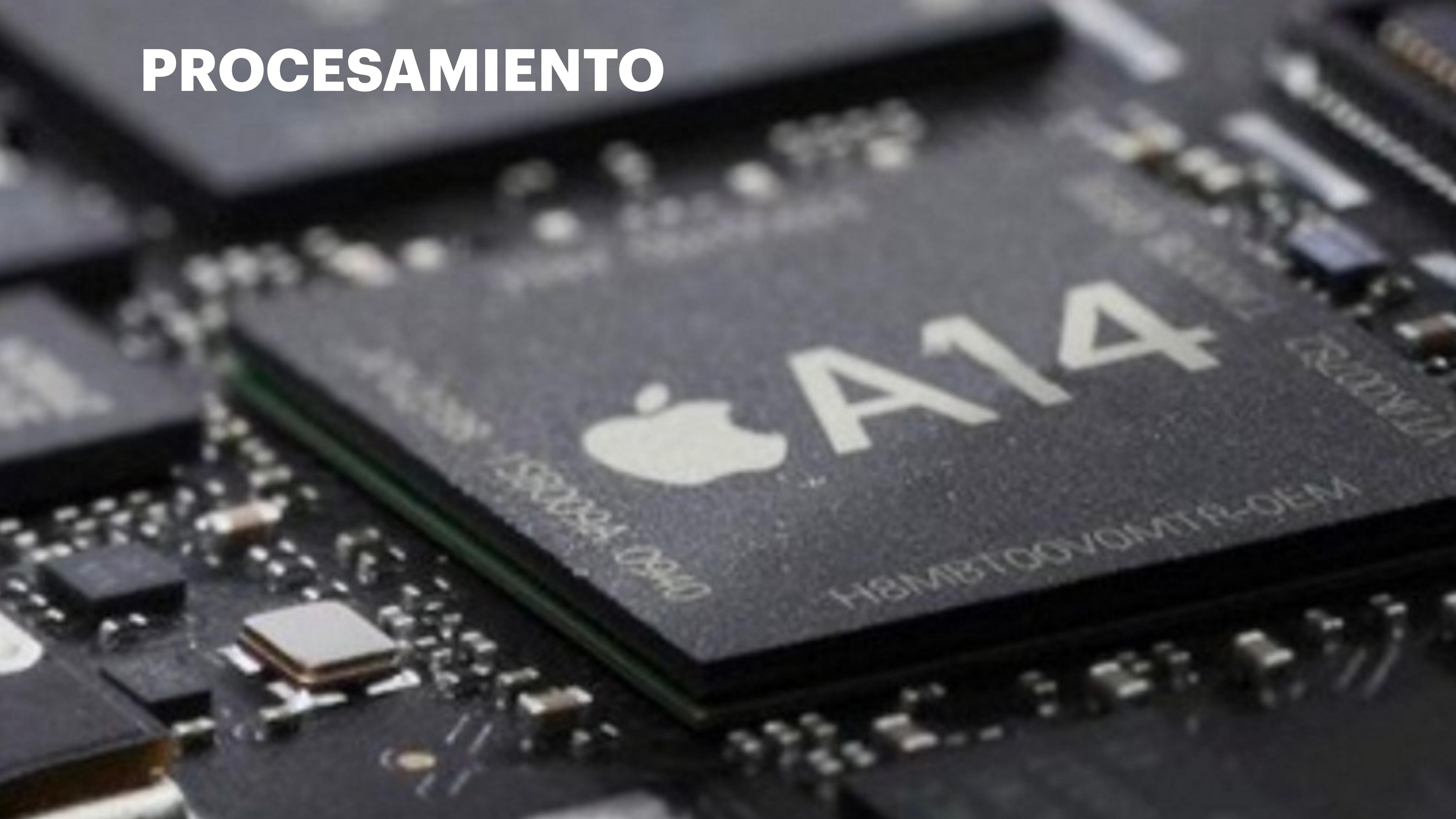
SO iOS 14

Chip A14



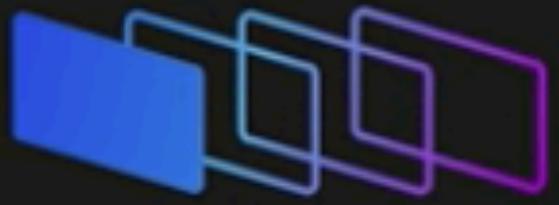
Smart Data Mode

PROCESAMIENTO



70%

faster ML
accelerators



New image
signal processor

**80%
faster**

Neural Engine

**50% faster
CPU**

Faster than any other
smartphone chip

First 5 nm chip



in a smartphone



4-core GPU

16-core **Neural Engine**



Machine
learning
controller.



Best machine
learning platform
in a smartphone



6-core CPU



**11.8
billion**

transistors

50% faster
GPU

Faster than any other
smartphone chip

11 trillion

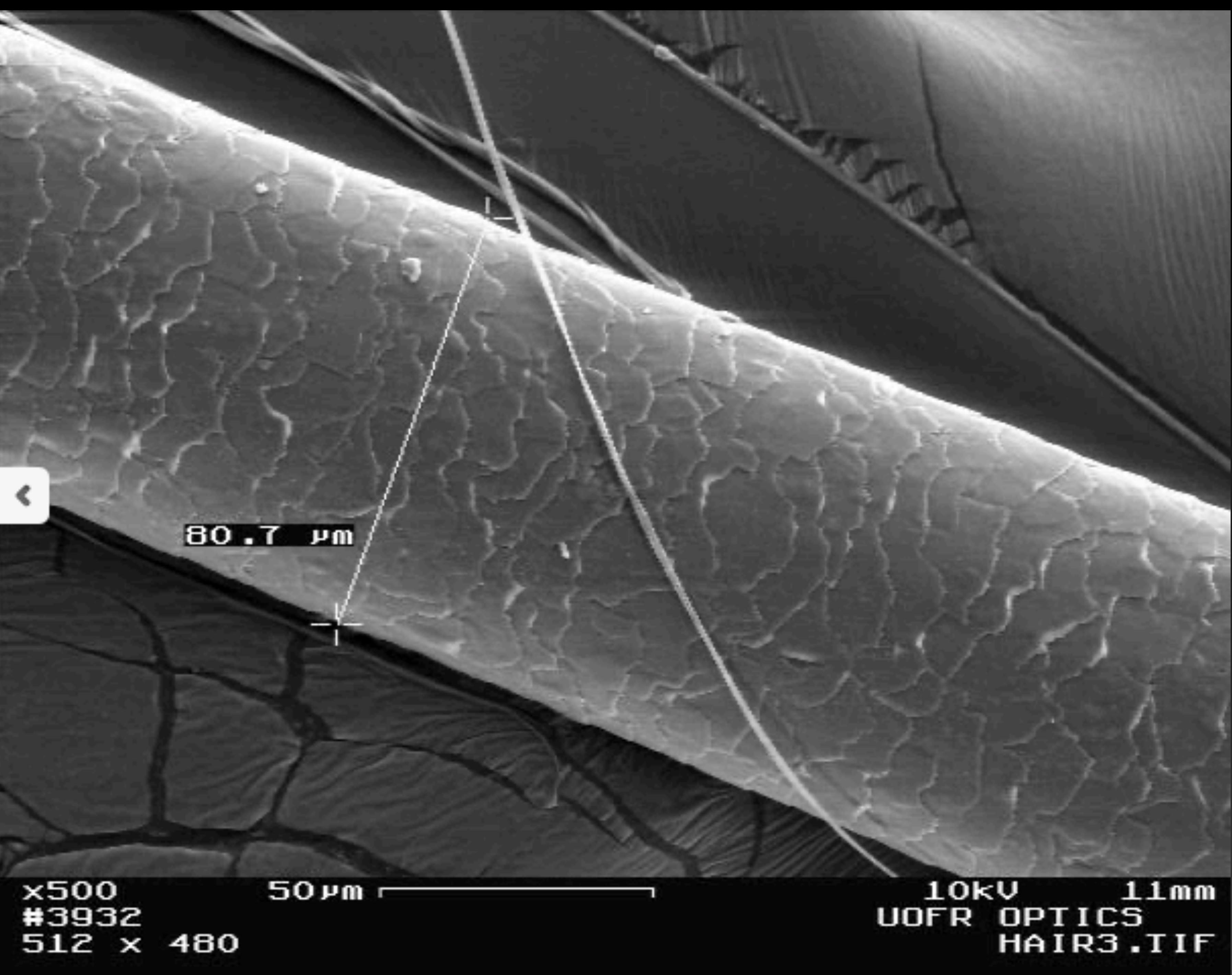
operations per second
on the Neural Engine



Improved memory
compression



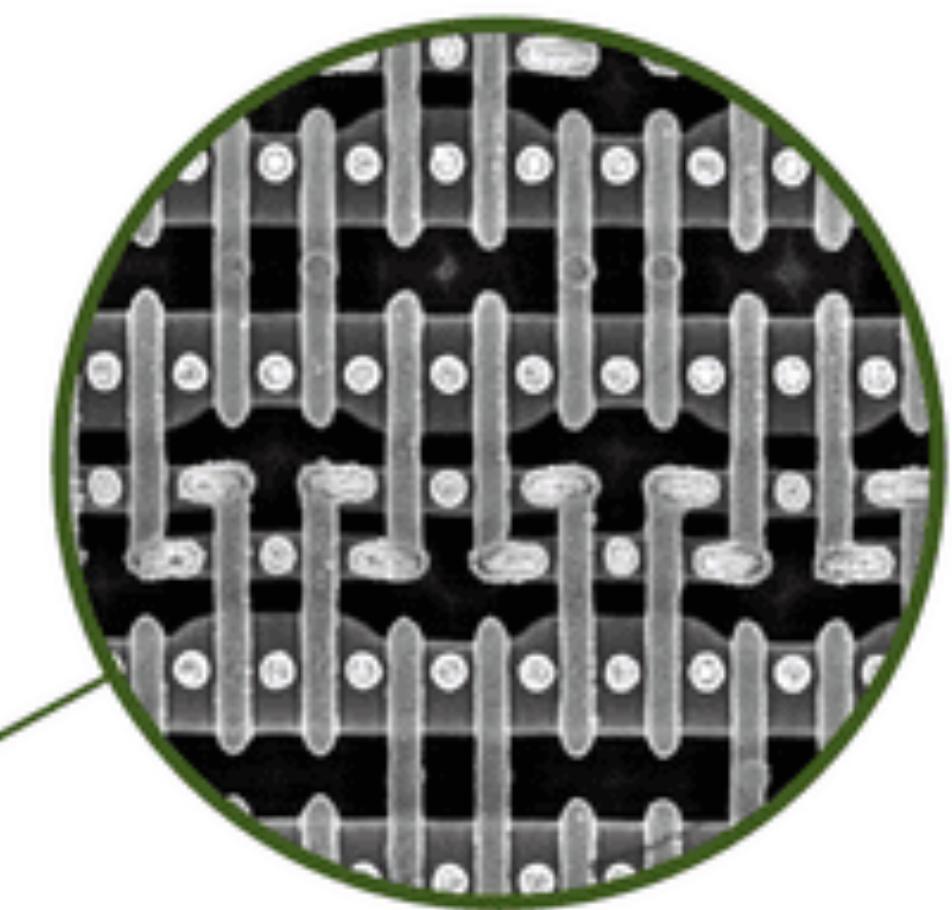
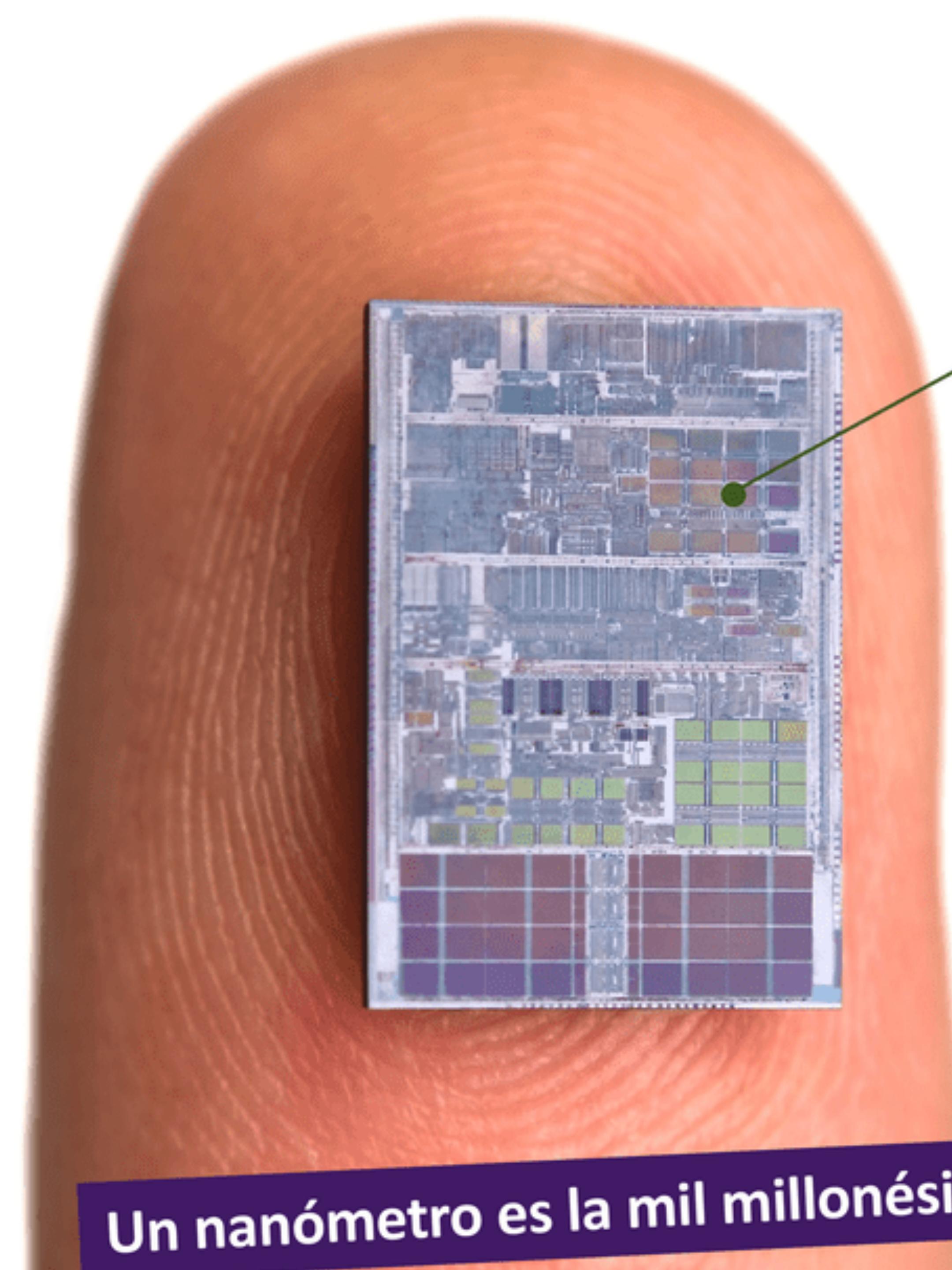
Secure Enclave



x500
#3932
512 x 480

50μm

10kV 11mm
UOFR OPTICS
HAIR3.TIF



La nanotecnología hace chips de computadora más pequeños y rápidos.

Un nanómetro es la mil millonésima parte de un metro

CÁMARAS





Wide camera

Ultra wide camera

Telephoto camera

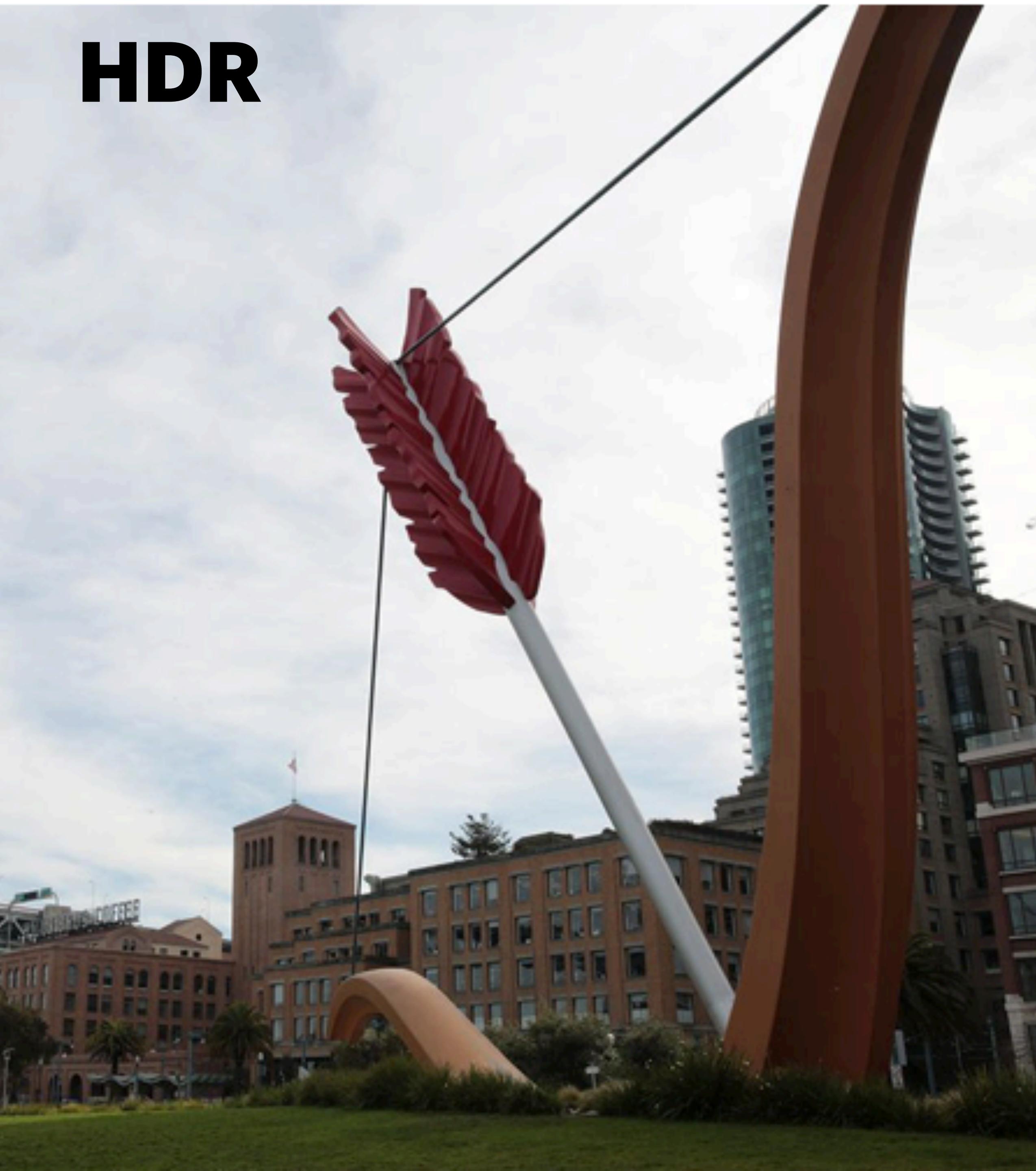
LiDAR Scanner



Computational photography



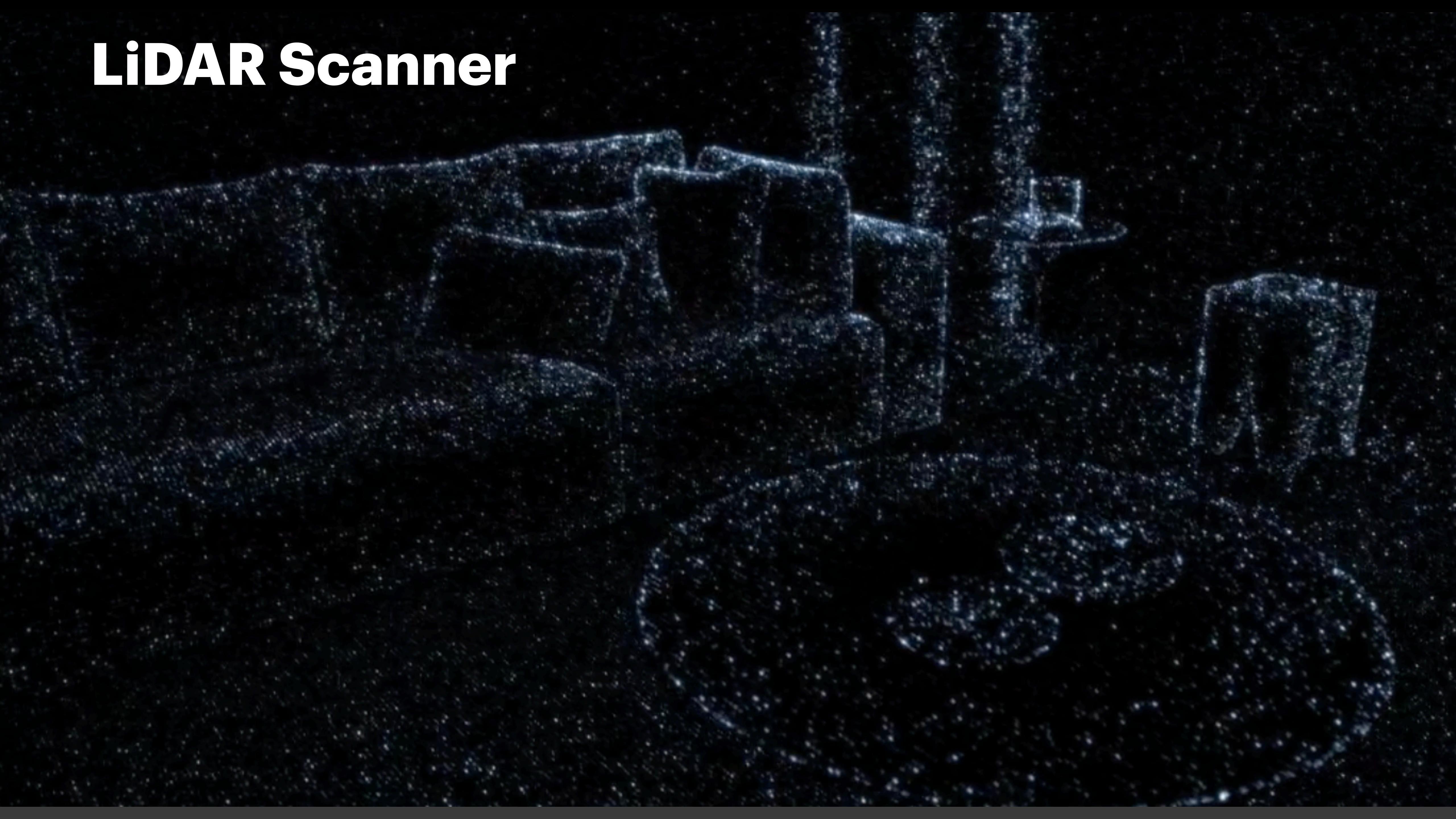
HDR



HDR



LiDAR Scanner





Apple ProRAW



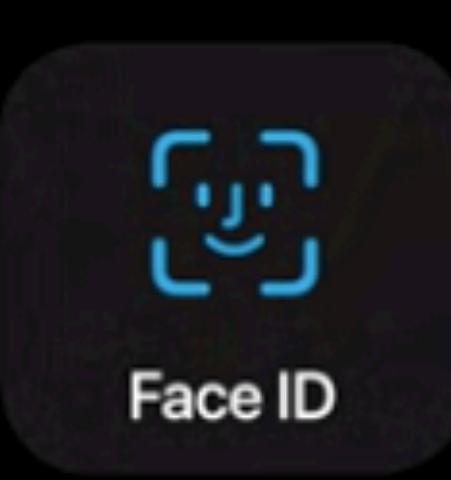
LiDAR



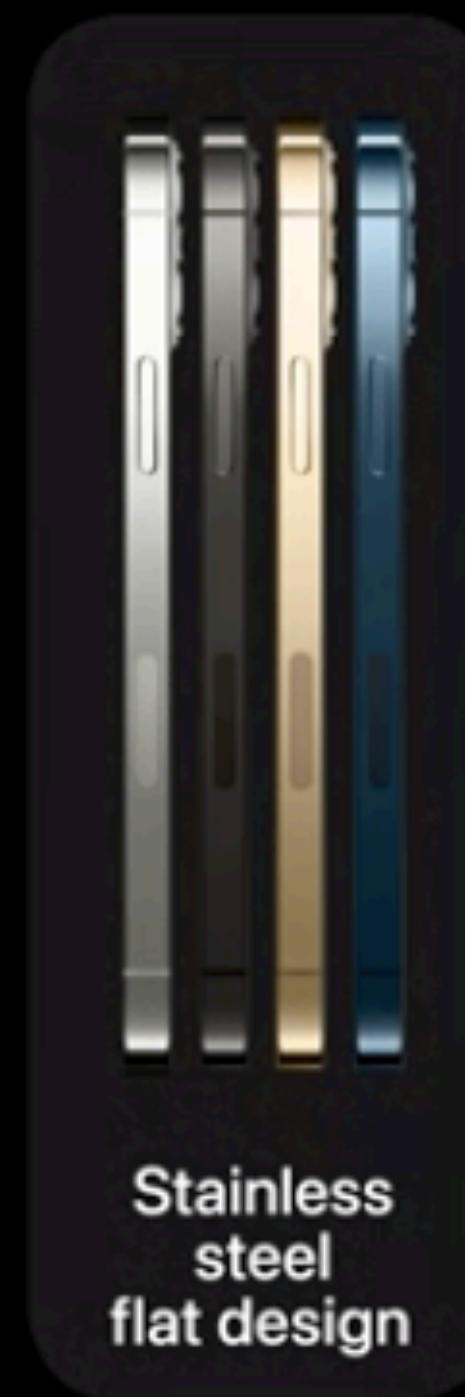
Smart HDR 3



4K HDR
video recording with Dolby Vision



Face ID



Stainless
steel
flat design



MagSafe



Pro camera system

Wide
Telephoto
Ultra Wide



6.7" 6.1"

New display sizes



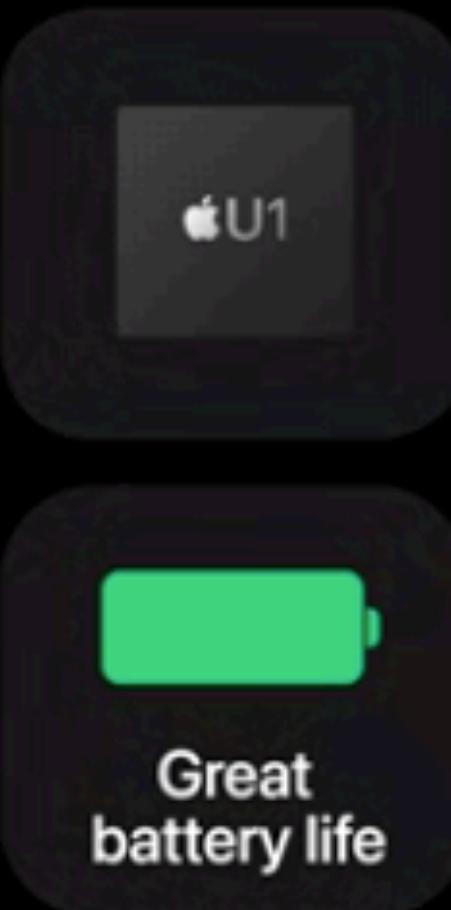
New colors
Pacific Blue
Gold
Graphite
Silver



5G



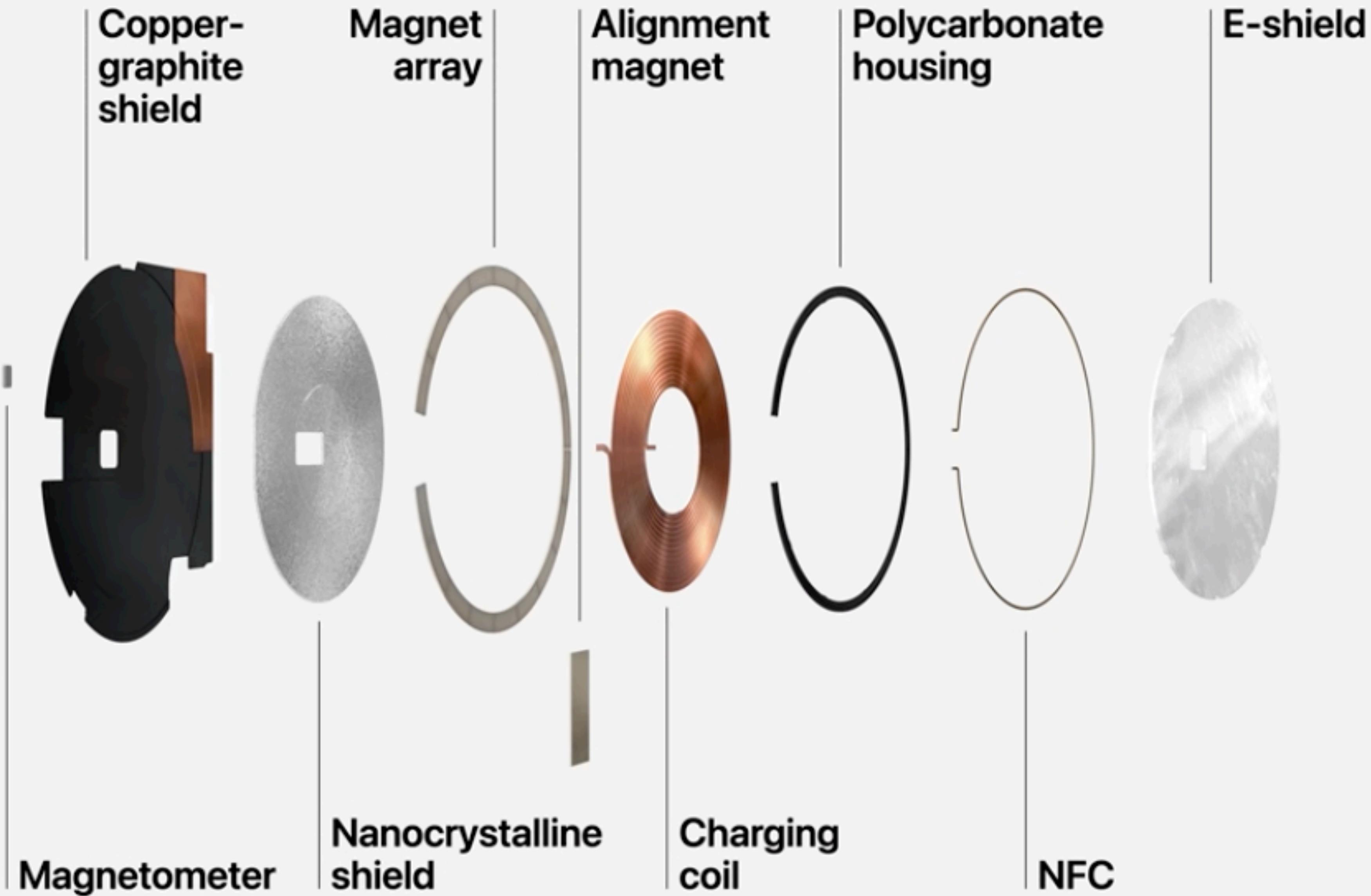
Water
and
dust
resistant
IP68 up to 6 m



Great
battery life

	iPhone 12	iPhone 12 Max	iPhone 12 Pro	iPhone 12 Pro Max
Panel Size	5.4"	6.1"	6.1"	6.7"
Resolution	2340 x 1080	2532 x 1170	2532 x 1170	2778 x 1284
PPI	475	460	460	458
Panel Supplier	Samsung Display	BOE/LG Display	Samsung Display	Samsung Display
Touch Film	Integrated	Add-on	Add-on	Integrated
Bits of Color	8	8	10	10
Rear Camera	Dual up to 64MP	Dual up to 64MP	Triple up to 64MP + LiDAR	Triple up to 64MP + LiDAR
Front Camera	12MP	12MP	12MP	12MP
5G Tech	Sub 6GHz	Sub 6GHz	Sub 6GHz, mmWave	Sub 6GHz, mmWave
Processor	A14 Bionic	A14 Bionic	A14 Bionic	A14 Bionic
RAM	4GB	4GB	6GB	6GB
Storage	128/256 GB	128/256 GB	128/256/512 GB	128/256/512 GB
Price	\$649/\$749	\$749/\$849	\$999 - \$1299	\$1099-\$1399

CARGA



SENSORES



Ambient light sensor

Proximity sensor

Flood illuminator

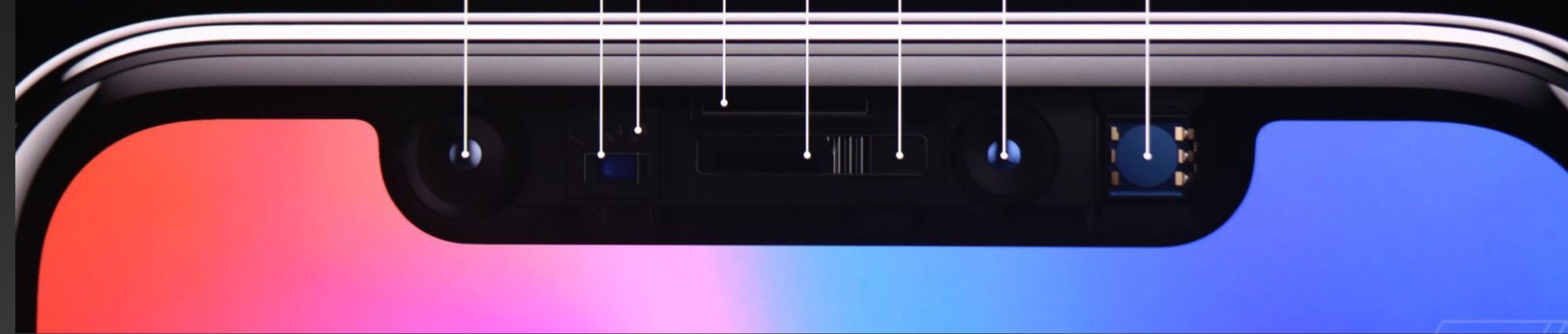
Infrared camera

Speaker

Microphone

Front camera

Dot projector



SENSORES

- Proximidad : Qué tan cerca está el dispositivo de algún objeto por ejemplo
- Acelerometro: Detectar movimientos y con qué velocidad
- Sensor de luz: Cuánta luz ambiental hay alrededor del dispositivo
- Sensor de humedad: Cuando el dispositivo se moja o esta en ambientes húmedos.
- Giroscopio: Como se esta moviendo en todos los ejes el dispositivo, posición
- GPS: Determina la localización geoespacial del dispositivo
- Barometro: Determinar la altitud
- Brújula: Dirección de orientación
- Sensor de huella: Reconocimiento de huellas dactilares
- Face ID: Reconocimiento de rostros