

中国信息通信研究院泰尔终端实验室

· 2025年12月

AI

AR

AI

AI

AI

AI

AI

AI

AI

AI

AI	1
AI	2
	3
AI	4
AI	6
	6
	10
	15
	17
	18
AI	19
	19
	24
	26
	28
	29
AI	29
	32
	36
	39
	39
	40

1 AI	3
2 AI	5
3	2024-2029	25
4	2025H1	25

1 AI	4
2	21
3 AI	30

AI	低	precedence
research	2024	721
	AI	
20%	2034	
4000	AI	

AI

AI

Rokid XREAL

INMO

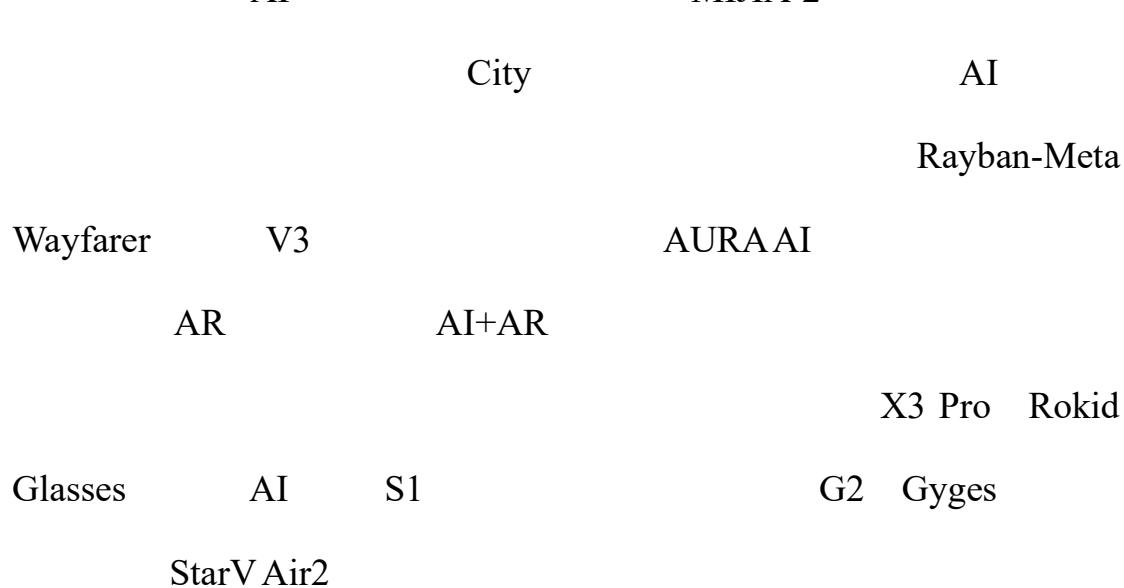
AI

AI



1 AI

AI



1 AI

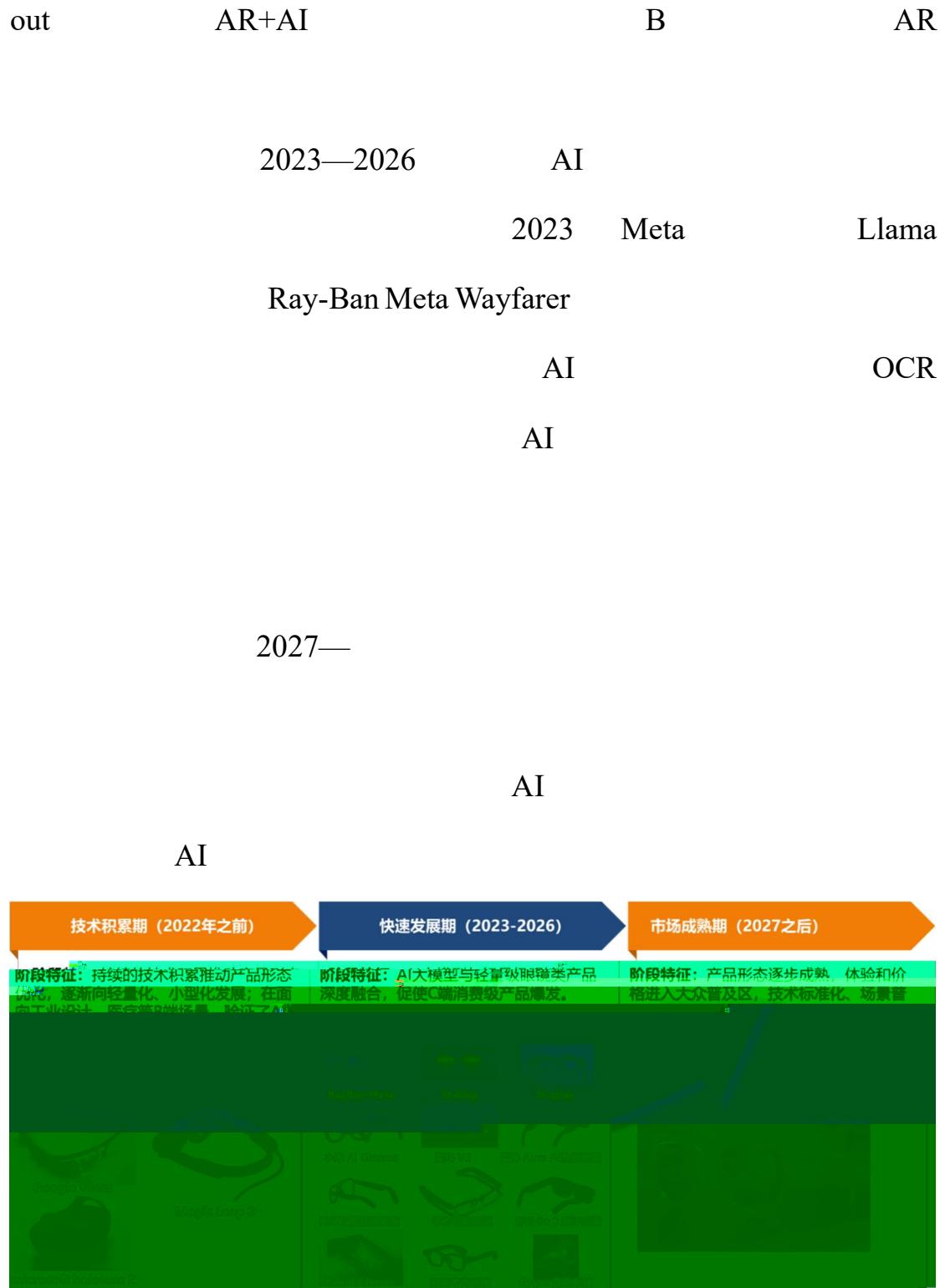
AI			MIJIA2 City	
AI		AI	Rayban-Meta Wayfarer V3 AURA AI	Vlog
AI+ AR	AR	BirdBath 3D	X3 Pro Rokid Glasses G2 AI S1 StarV Air2	

AI

2022

2013 Google Google Glass

2016 HoloLens inside-



2 AI

AI

AI

AI “ ”

1.

AI

≥80%

Lumus

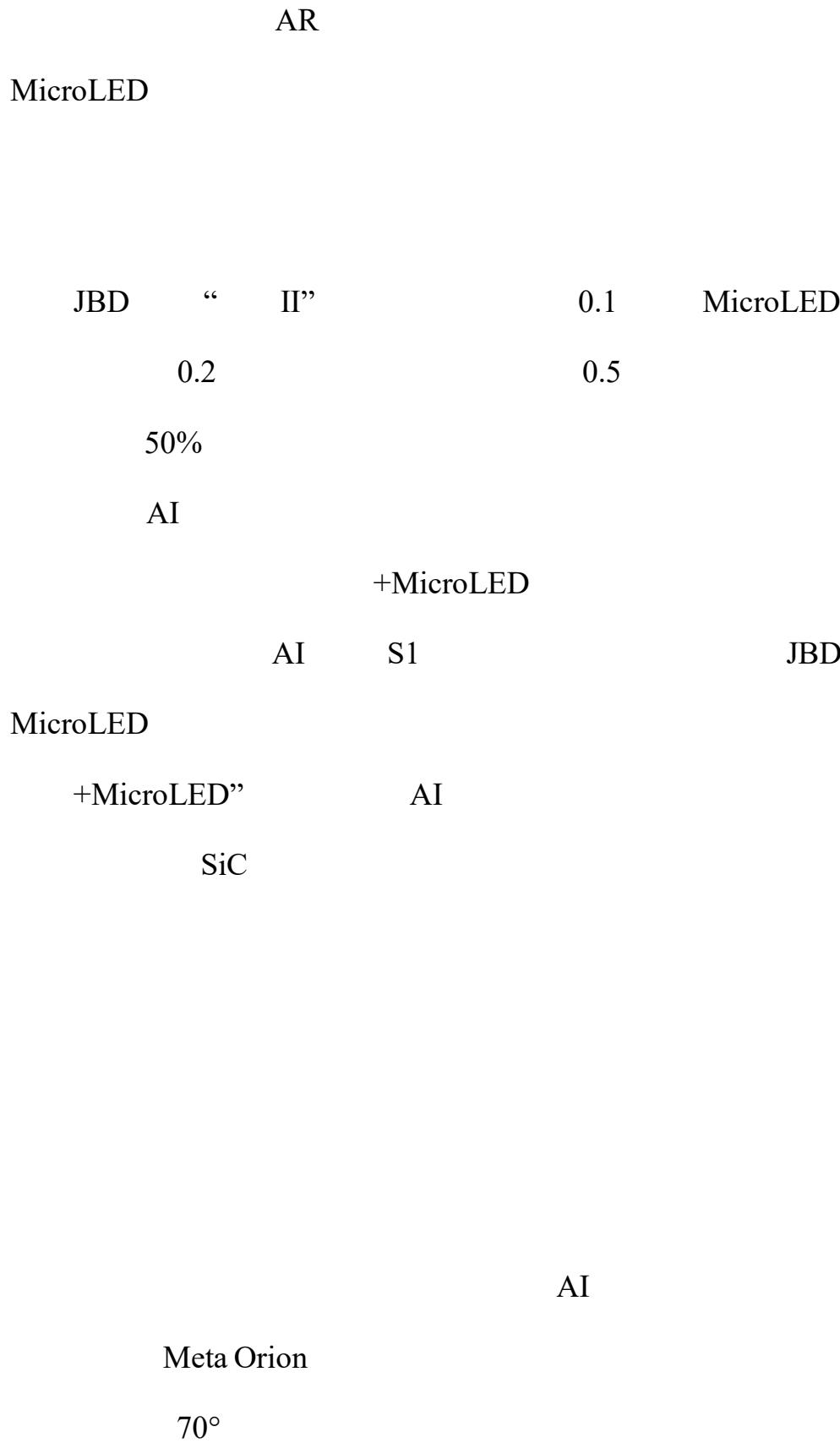
PVH

15

26

40

LCOS



AI

2024

12

2.

AI

100—120mAh

8—14

3.	AI	6nm		
4nm	AR1 Gen1	4nm		
CPU	GPU	NPU	ISP	4K
AI				25%
30%				
<15mm	<50g			三
导		ePoP		
SoC	LPDDR			
40 mm ²		3D SiP		
		CMOS		
	Chiplet			
AI				
“		”		AI

1.

三

AI

AI

TensorFlow Lite Micro

“Hey

Meta” “ ” “ ”

AI

V3 +

5

RNNoise iFLYREC

三

HRTF

AR

200Hz–8kHz

FFT

ML

2.

AI

三

AI

/

“ ” “ ” “ ” “ ”

AI

OIS

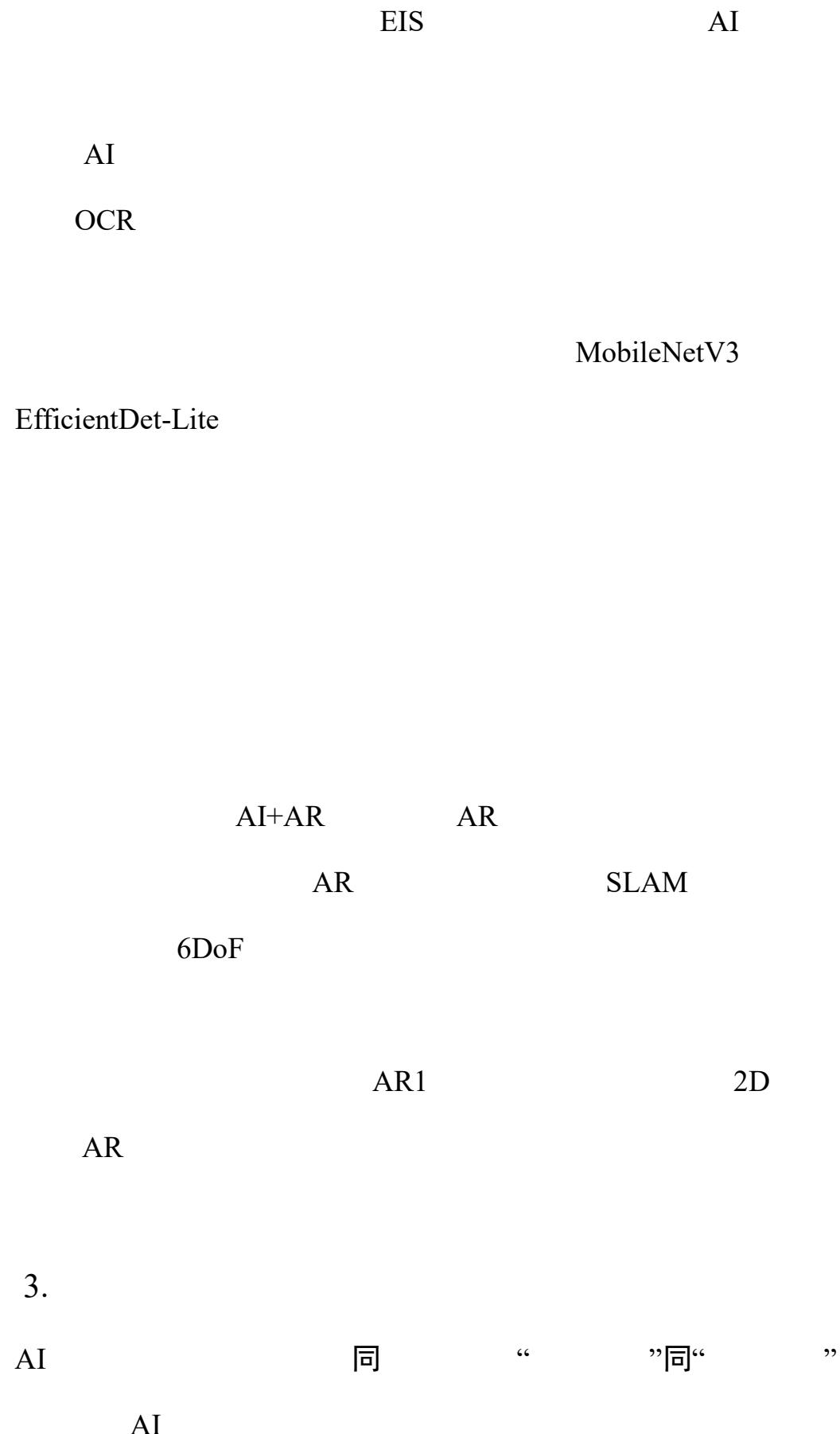
Ray-Ban Meta Rokid

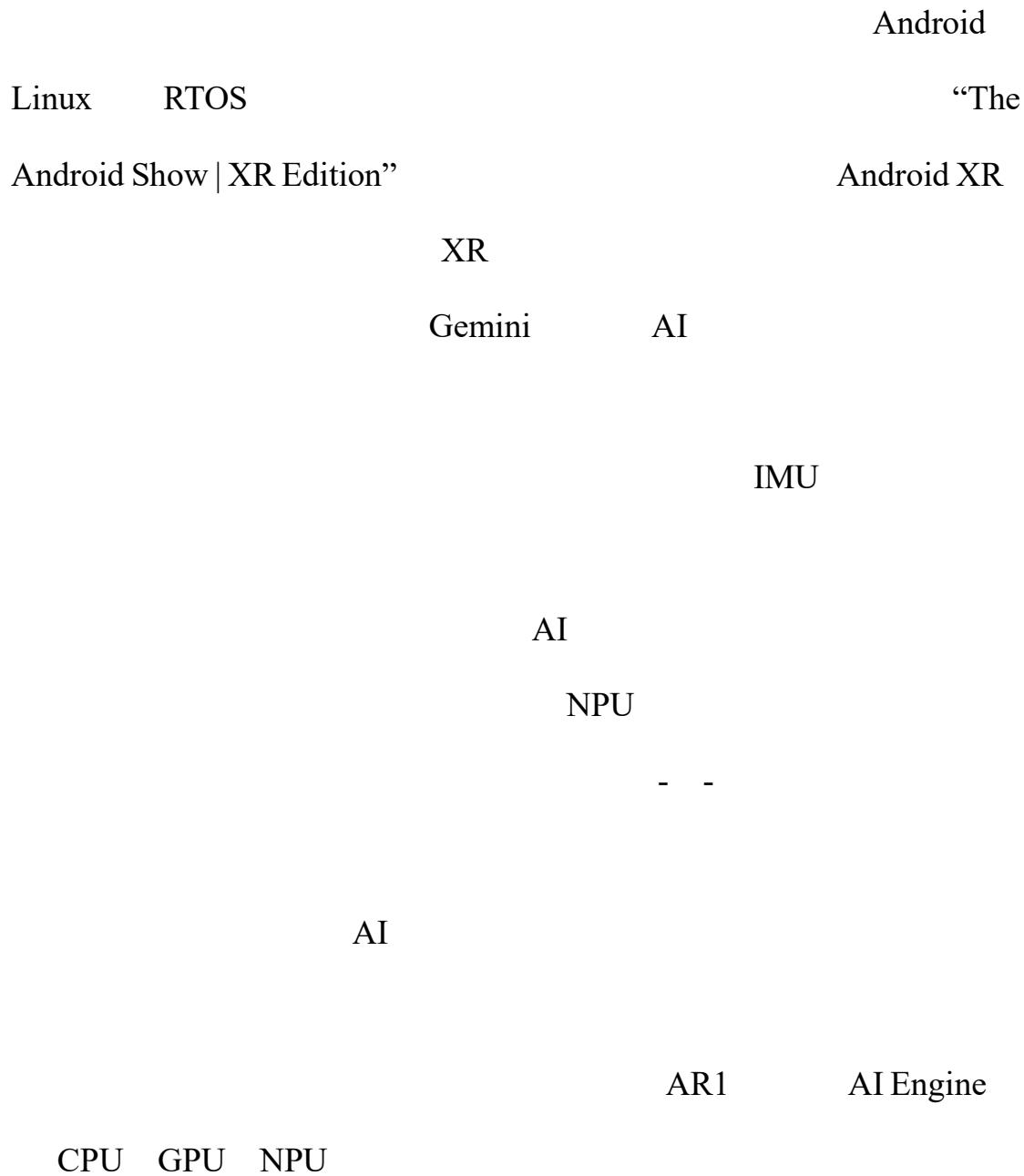
Glasses

1080p@30fps

EIS

10%–15%





TEE

AI

30

1.

争 四 AI

AI

“ ”

55

2.

低

三

AI+AR

$\geq 80\%$

300nits

3000nits

DC

PWM

>3000Hz

3—6

3.

三 低

AR

AR

AI

“ ”

AI

AI

AI

1.

AI

≡

AI

AI

“ ”

AI

Always-on

2.

低 AI “ ”别“ ”

AI “ ”

”

IDC 2026

AI 30%

75% AI

AI

AI “ ”

“ ”

AI
IMU

AR

“ —— ” AI

AI

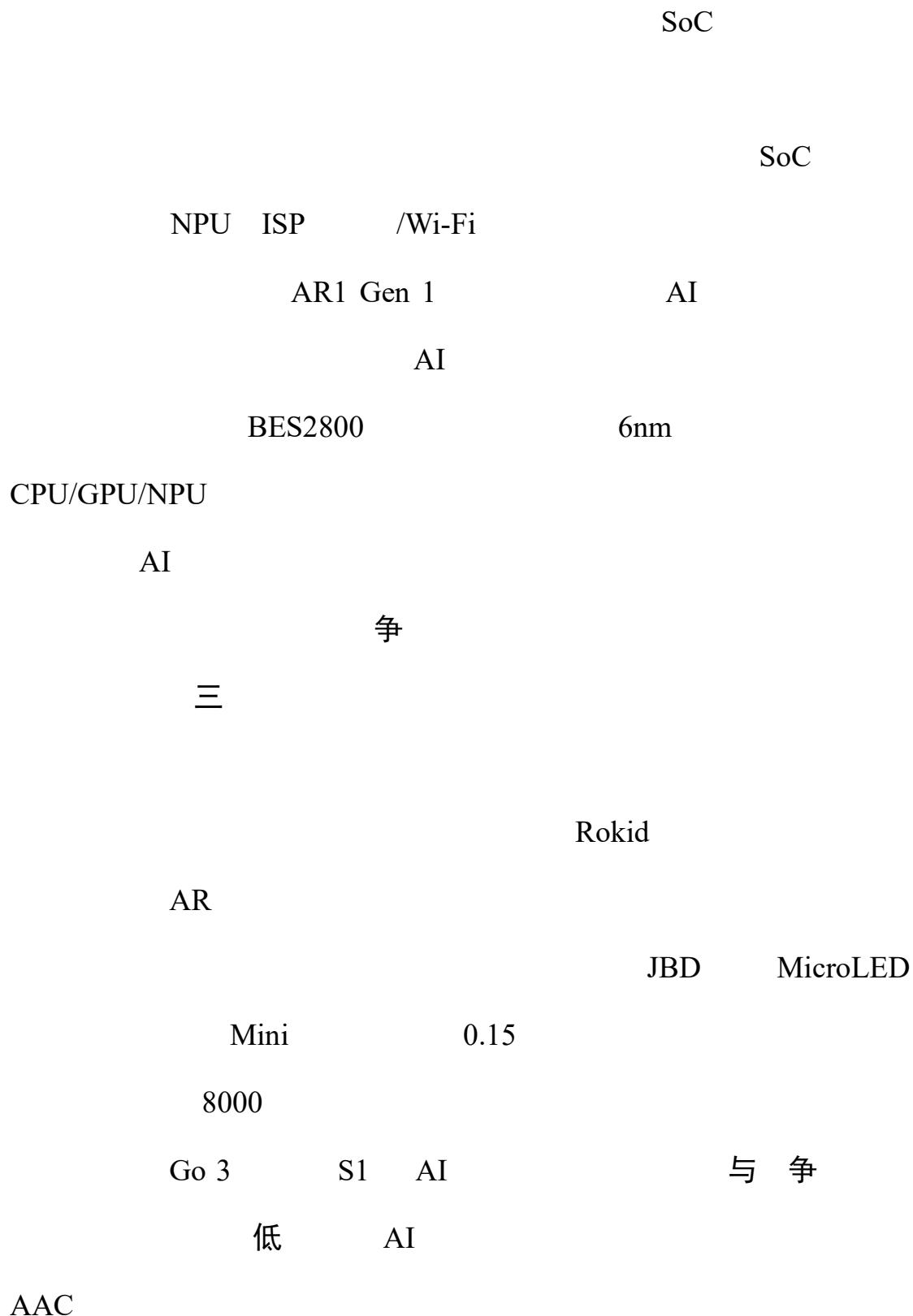
- -

AI 三

AI

AI

AI AI



			AI		MEMS
			三		三
	IMU				
	IMX 681 CMOS				AI
OCR				TDK	
InvenSense		IMU			
			AI		
	2				
AR1 Gen1			AR / SoC 6DoF SLAM		AI
BES 2800				AIoT SoC	NPU
BES 2700			DSP		

IMX 681	CMOS		CMOS 1.4μm AI	12MP 1/2.6"
MINI 2	MicroLED	JBD	MicroLED AR	
ePOP			50% PCB AI	eMMC LPDDR
				0.5mm
Lhasa11			FOV 30	0.4mm
SIDW40A			40	AR
0920				

ODM/OEM

AI Rokid XREAL XR

Meta Pico

AI

AI

AI

AI

AI

AR1

CMOS

IDC

2025

406.5

108

64.2%

26.6%

2025

1280

275

2029

4,000

2025

Ray Ban-Meta

52.5

17

AI

V3

AI

2

G1

StarV Air 2

AI+AR

2025

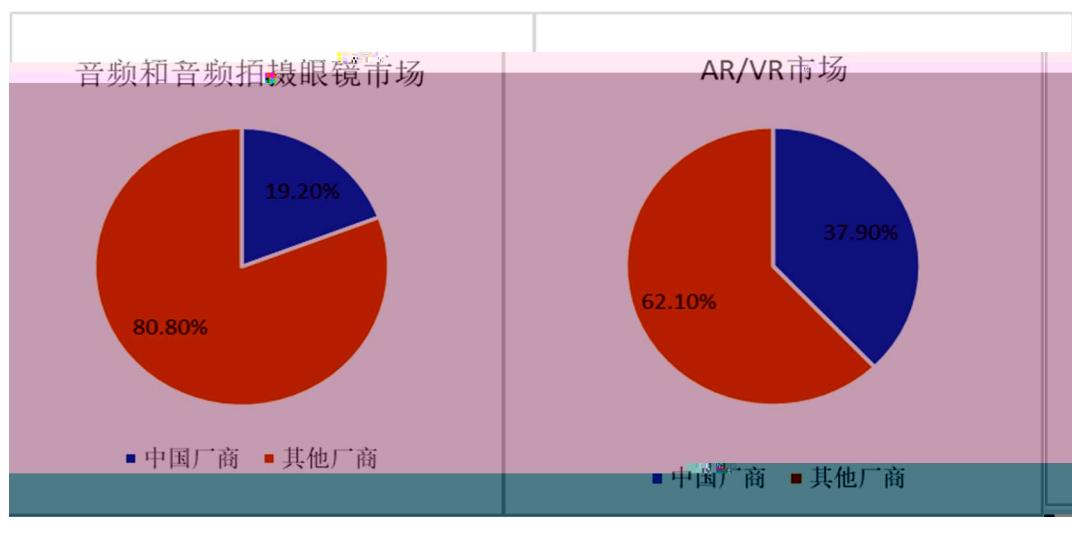
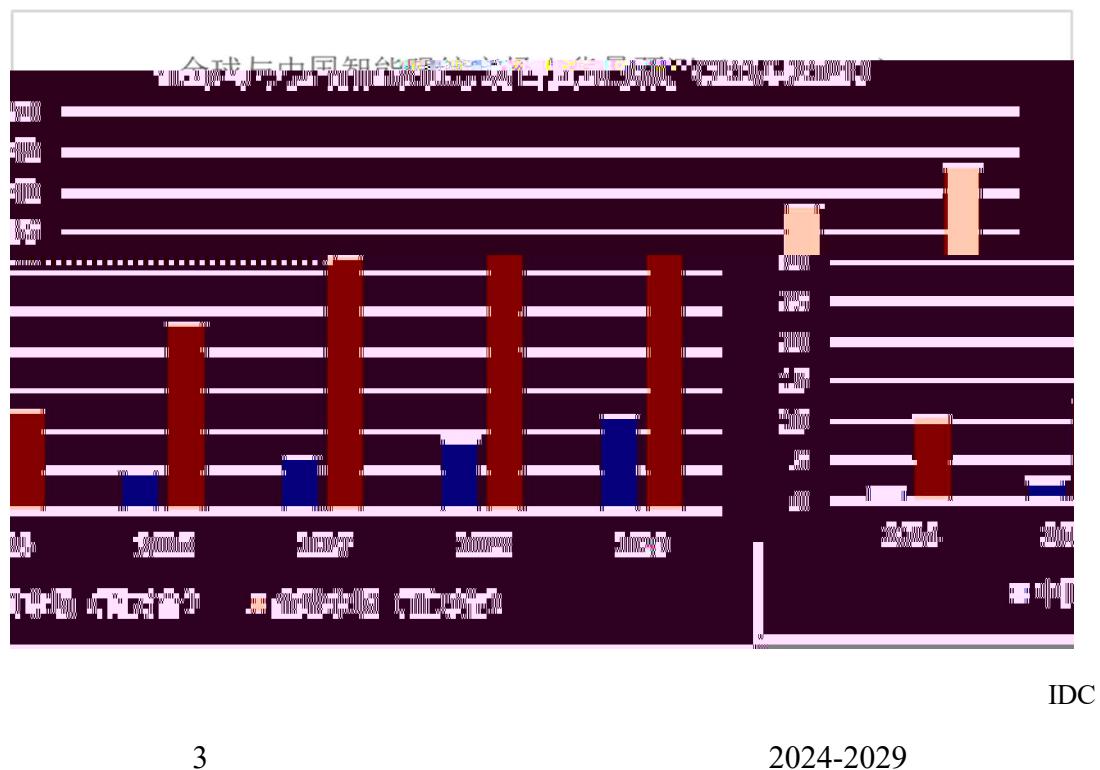
Rokid Glasses

Meta Oakley

AI

AI

AI



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AI

to C

力 AI

AI

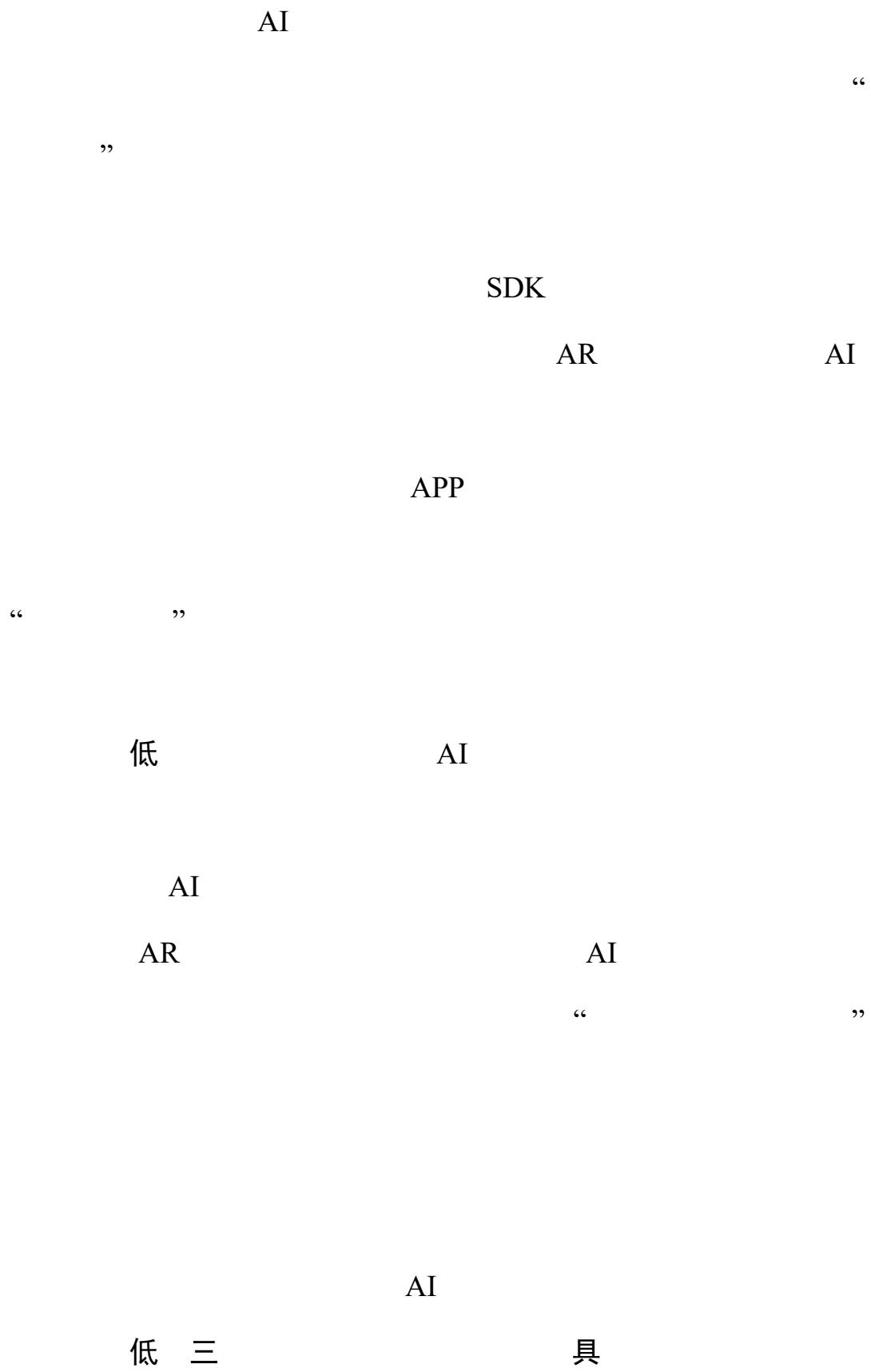
“ ”

AI

争

“ ” “ ” “ ”

AI



AI

AI 争

“ ”

三 AI

MicroLED

JBD

AI

“ ”

力

2026

AI

AI 力

XREAL Rokid

AI

AI

AR

AI

AI

AI 关

AI

AI

AI

3 AI

					AI
2	AI	2025 4			“ ” “ ”
AI	AI	2025 11		AI	App
Ray-Ban Meta Wayfarer	AI	2023 9	Meta- RayBa n	Meta AI	Llama
V3 AI	AI	2025 1		AI	
AI	AI	2025 6			

Oakley Meta Vanguard AI	AI	2025 9	Meta- Oakley	
AI Pro	AI	2025 11		AI
Rokid Glasses	AI+AR	2025 9	Rokid	OCR
Meta Ray- Ban Display	AI+AR	2025 9	Meta- RayBa n	Wayfarer LCOS AR
AI S1	AI+AR	2025 11		
G2	AI+AR	2025 12		

1.

AI

AR

“

”

1AI

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“AI ”

AI

1.

30 3

“3

”

80%

2.

“

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3.

“ ”

0.5

2AI

Rokid Glasses

“ ”

“

10 ”

“ ”

Rokid Glasses

“

”

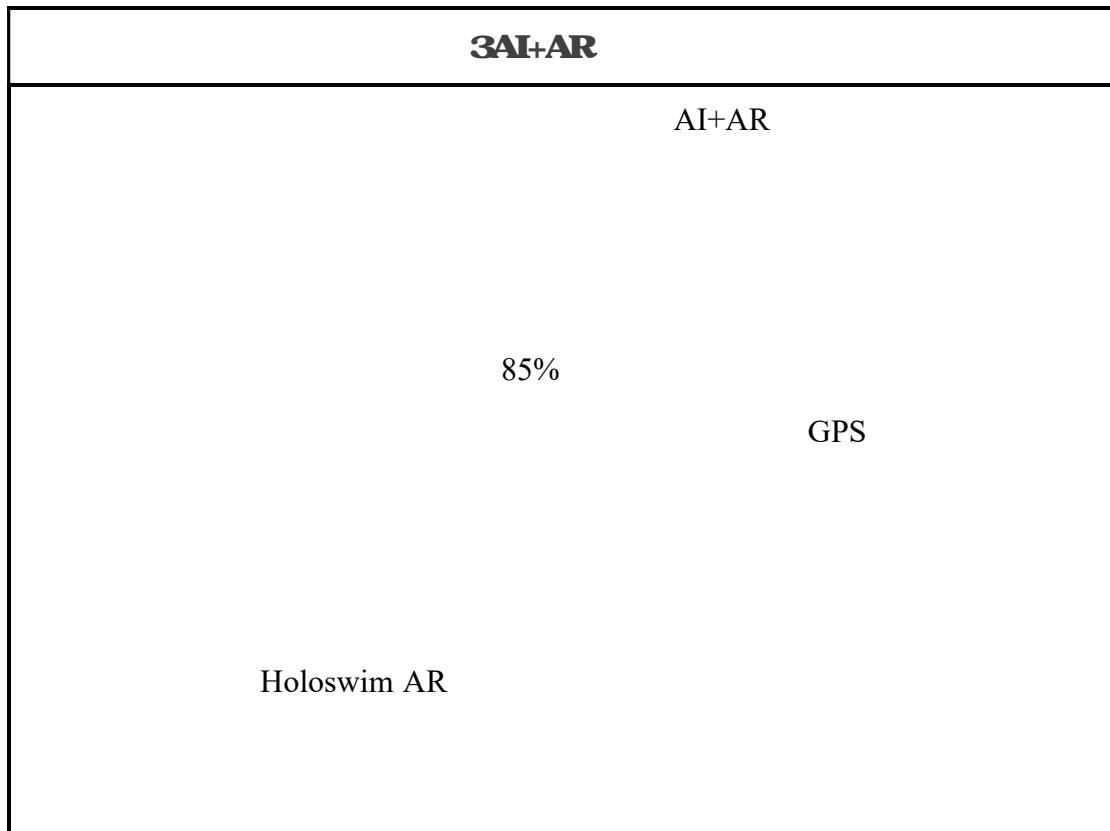
“ ”

AI

2

AI

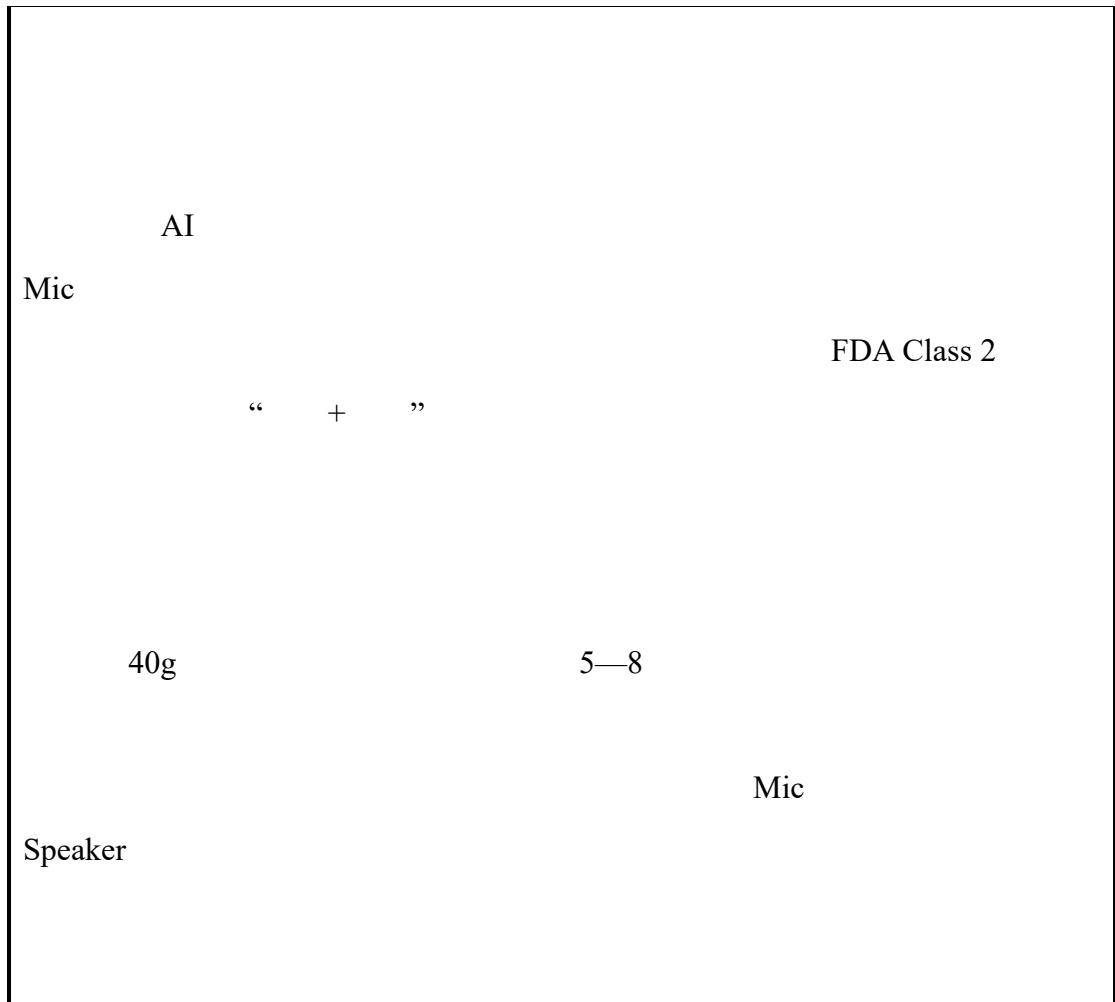
AI



3

AI

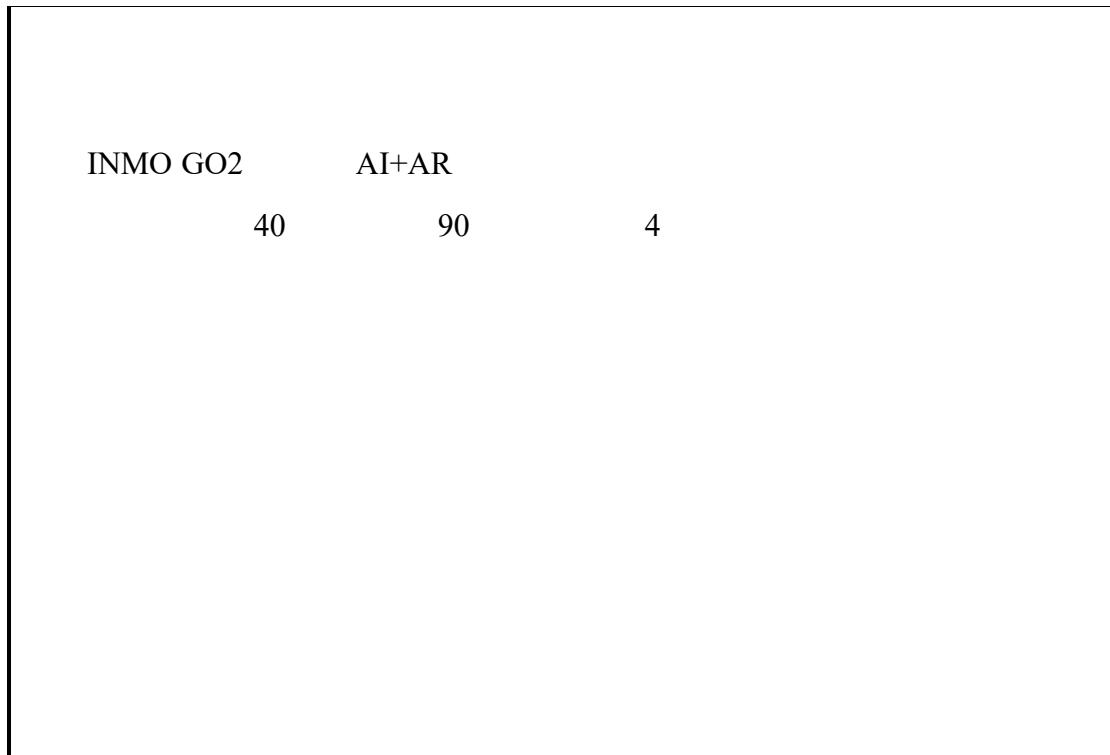




4

AI





INMO GO2

AI+AR

40

90

4

1.公

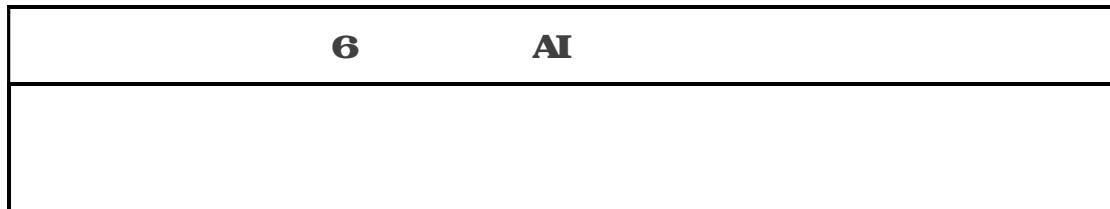
AI

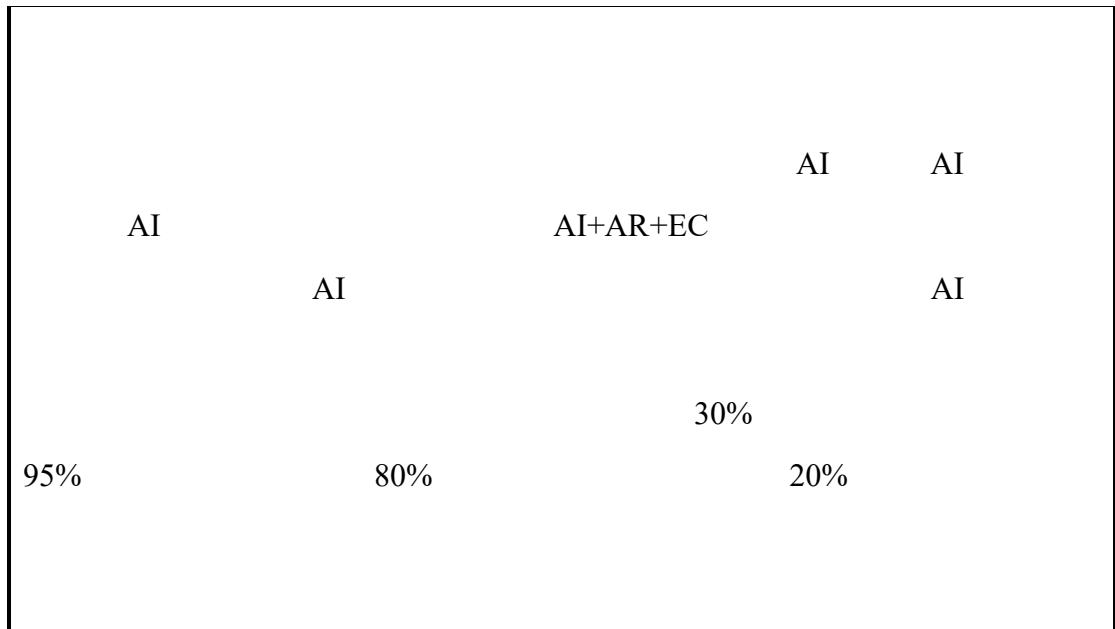
AR

AI

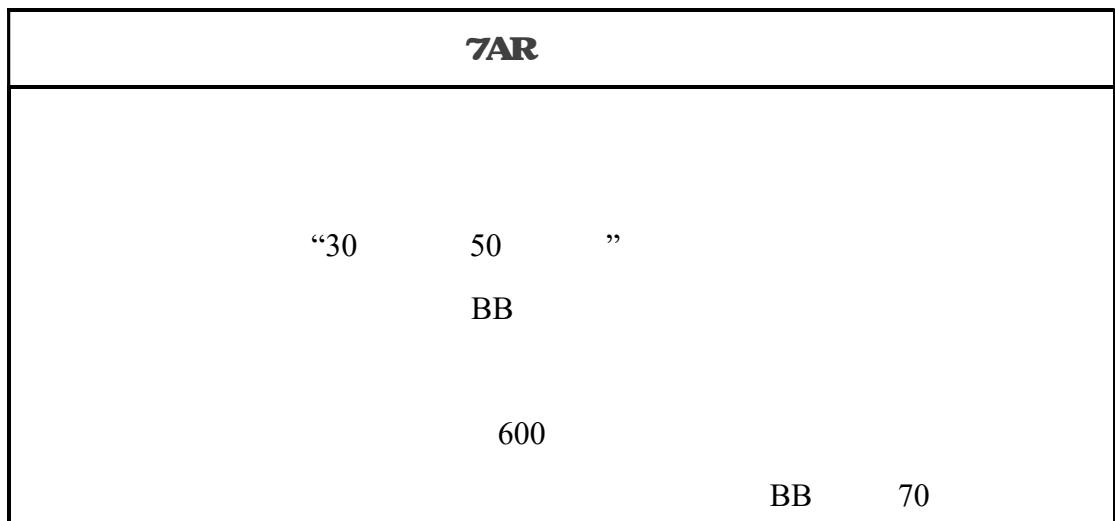
6

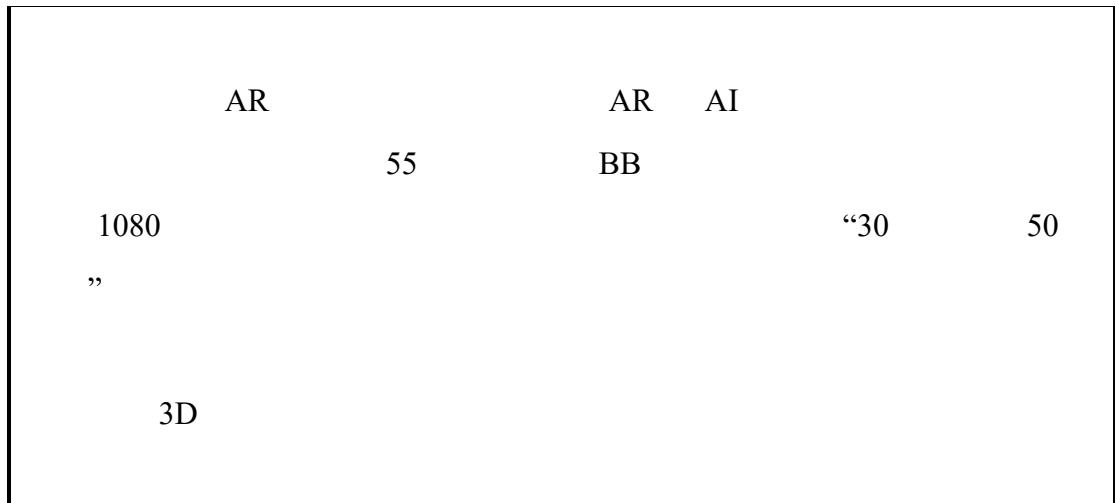
AI





2.



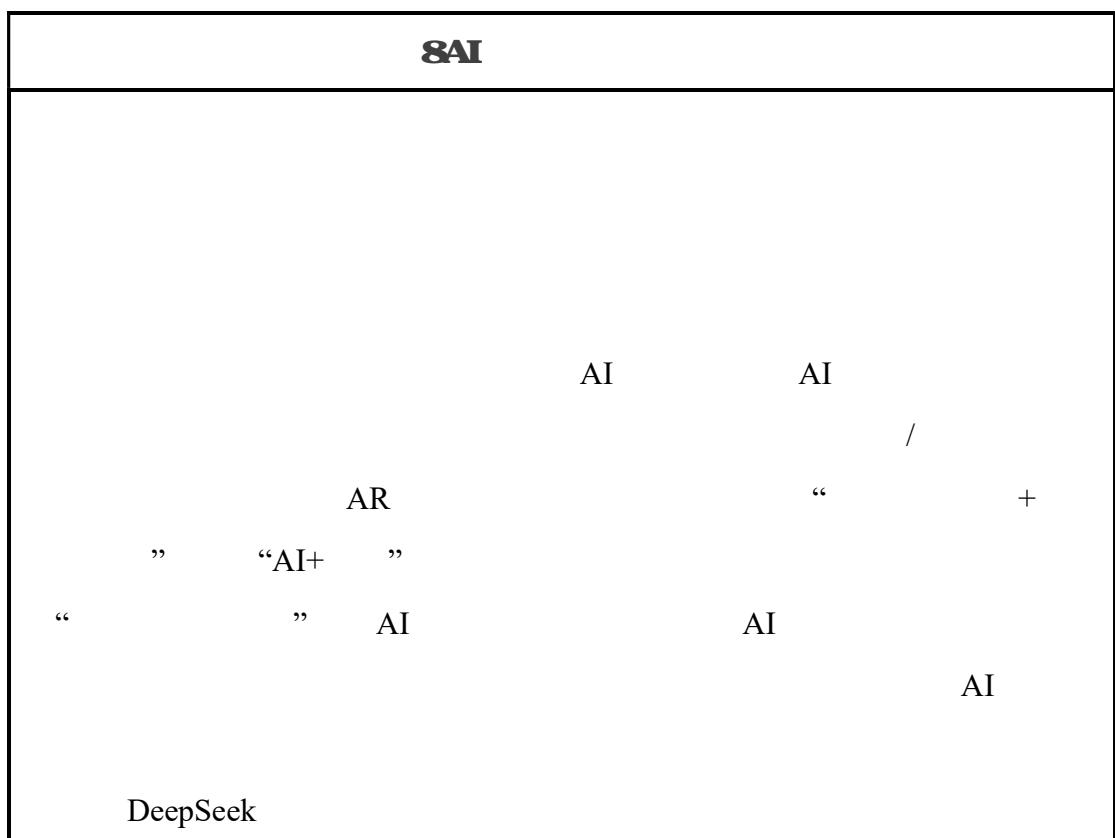


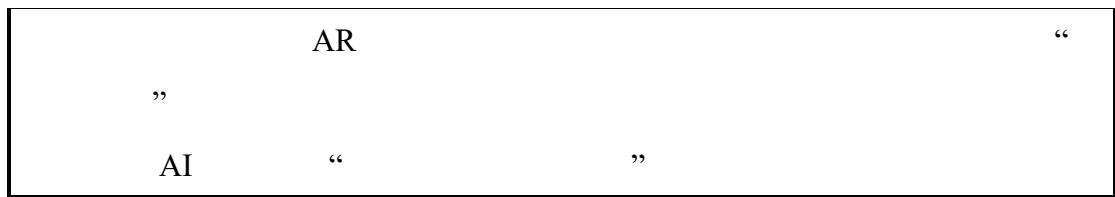
3.

AI+AR

AI

3D





AI

MicroLED/LCOS

AI

eSIM

AI

AI

AI

AR

AI

“ ” “ ” “ ”

三

“AI + ”

AI

三

AI

AI

AI

	Artificial Intelligence (AI)
	Augmented Reality (AR)
	Beamforming
	Chiplet
	Cloud-Edge Synergy
	Complementary Metal-Oxide-Semiconductor (CMOS)
	Central Processing Unit (CPU)
	Degree of Freedom (DoF)
	Digital Signal Processor (DSP)
	Electronic Image Stabilization (EIS)
	embedded MultiMediaCard (eMMC)
	Fast Fourier Transform FFT
	Field Of View (FOV)
	Flexible Printed Circuit (FPC)
	Frame Per Second (FPS)
	Graphics Processing Unit (GPU)
	Human Factors Engineering
	Head Related Transfer Functions (HRTF)
	Inertial Measurement Unit (IMU)
	Image Signal Processor (ISP)
	Liquid Crystal Display (LCD)
	Large Language Model (LLM)

	Low Power Double Data Rate (LPDDR)
	Multi-frame Fusion
	Multimodal Interaction
	Neural Processing Unit (NPU)
	Optical Character Recognition (OCR)
	Original Design Manufacturer (ODM)
	Original Entrusted Manufacture (OEM)
	Organic Light-Emitting Diode (OLED)
	Optical Image Stabilization (OIS)
	Operating System (OS)
	Optical Waveguide
	Printed Circuit Board (PCB)
	Personal Agent
	Simultaneous localization and mapping
	SLAM
	System on Chip (SoC)
	Trusted Execution Environment (TEE)
	Vergence-accommodation conflict (VAC)
	Virtual Reality (VR)
	Extended Reality (XR)

中国信息通信研究院 泰尔终端实验室

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