Total Display Control

CHIP

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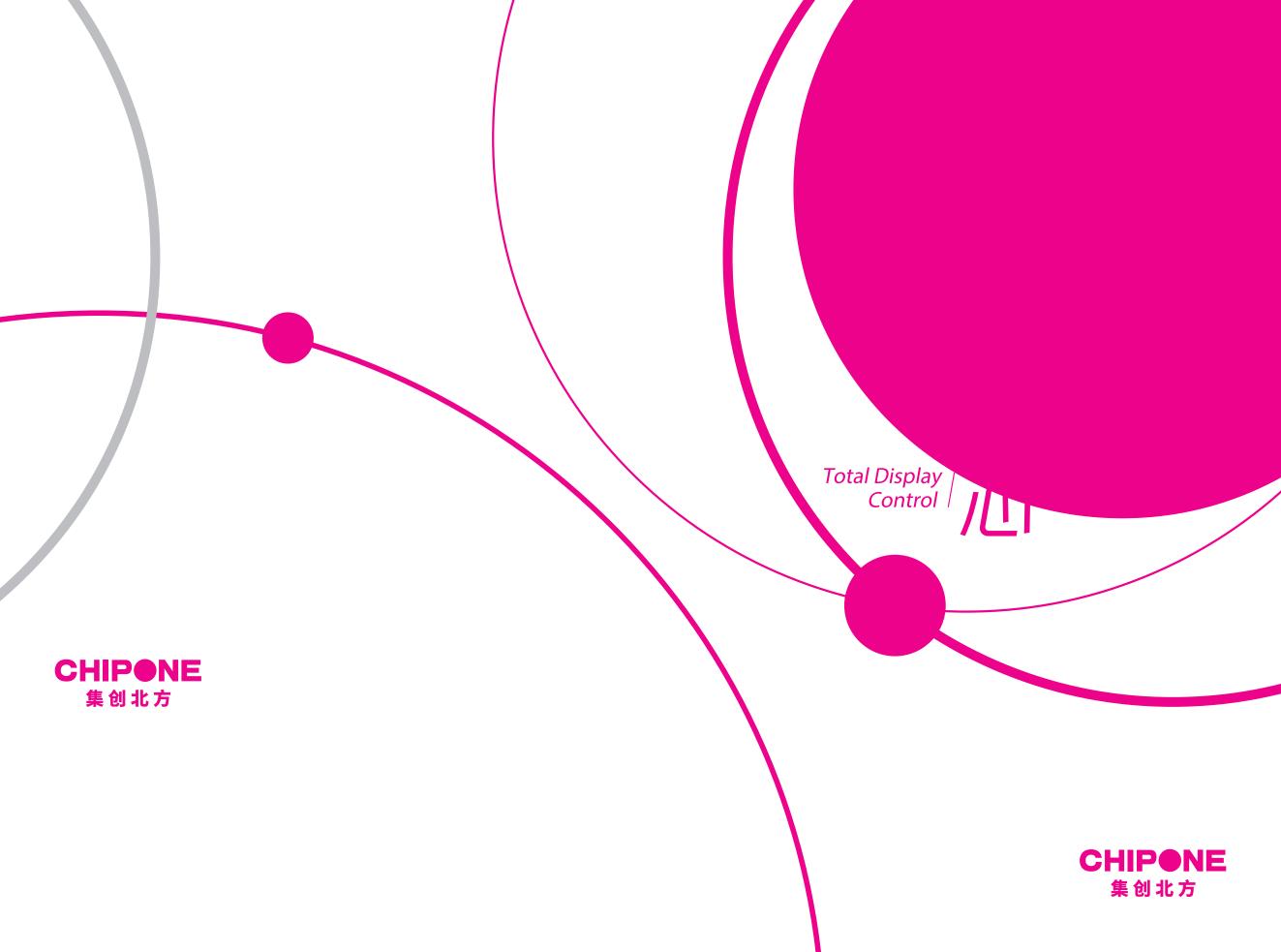
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Chipone Core Values

Integrity, Responsibility, Professional Perseverance

Vision

To be a leading company of display IC design

vote to becoming the world's leading provider of display IC products and solutions

Chipone Official website

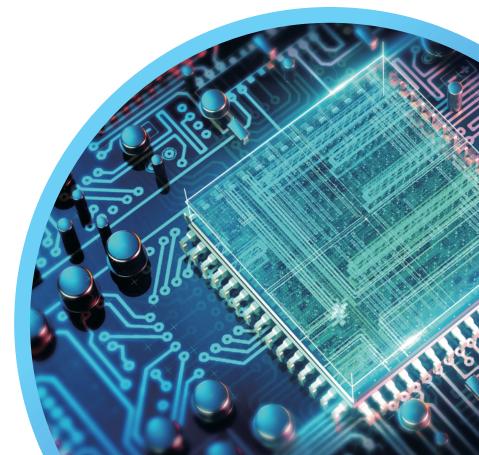


Company Profile

Founded in 2008, Beijing Chipone Technology Co., Ltd. is an international leading display chip design company, committed to becoming a leader in total display control.

The company now has a full range of display driver chips, power management chips, SoC chips, automotive chips and other product series, which can be widely used in mobile terminal products, wearable devices, indoor and outdoor ultra-high-definition displays, AR/VR, industrial, automotive, medical and other scenarios.

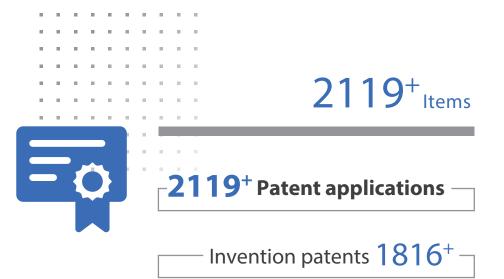
The market share of Chipone's LED display driver chips has ranked first in the world for four consecutive years, and the market share of LCD DDIC, TDDI chips and panel power management chips for smartphones has ranked first among mainland manufacturers. As of the end of September 2023, Chipone has applied for a total of 2,119 domestic and foreign patents, and has won many honors such as "National Intellectual Property Advantage Enterprise" and "National Manufacturing Single Champion Demonstration Enterprise".



Chipone Profile

1250⁺Employees





-Oversea patents
$$1079^+$$
 -

12 countries and regions

JUUU

hed in 2008

5 years of

history

Beijing	Zhuhai	Shenzhen
Shanghai	Suzhou	Hefei
Chengdu	Hong Kong	Taiwan,China
Silicon Valley	, Korea	Singapore



1st

- 2022 Global market share of LED display driver chip ranks 1st
- 2022 Mainland China market share of Panel power management chip ranks 1st
- 2022 Global market share of LCD TDDI chip ranks 1st among the mainland Chinese manufacturers
- 2022 Global market share of smartphone LCD DDIC ranked 1st among mainland Chinese manufacturers

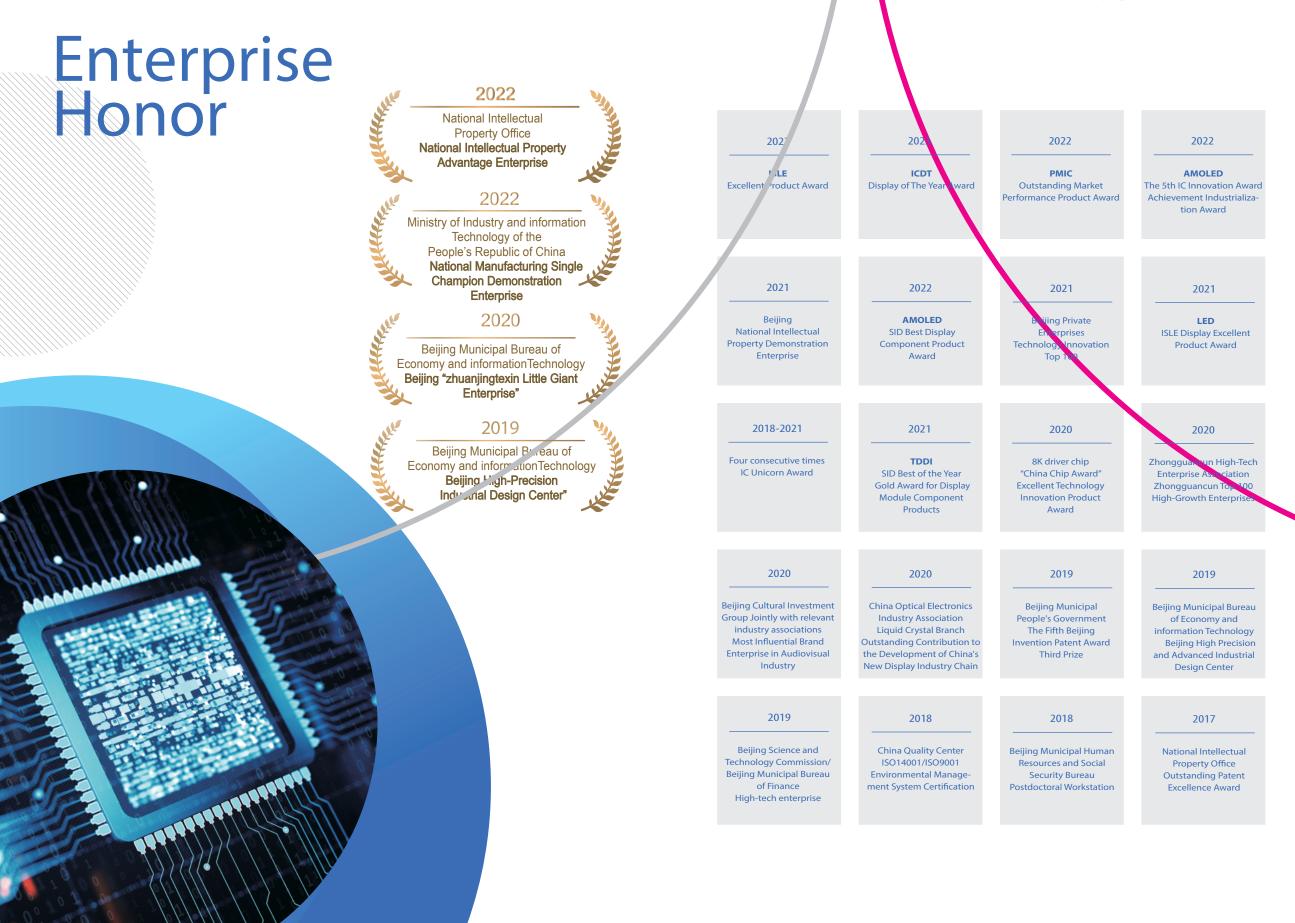
Data source: Omdia 2023 CINNO Research TrendForce

25 million

- TDDFIC shipments exceed 25 million in a single month
- 10 million chips lit up the Tiananmen Square screen on the 70th anniversary of the National Day

500 million

- TDDI total shipment exceeded 500 million
- Touch IC has shipped over 100 million in consecutive years



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Ecological Partners

In terms of upstream suppliers, Chipone has established stable cooperative relationships with large wafer manufacturers and sealed packaging and testing manufacturers, such as Vanguard Intentional Semiconductor Corporation, Nexchip, SMIC, TFME, JCET, and CHIPMOS to ensure the steady improvement of the company's products' shipments and quality.

In terms of downstream clients, Chipone's key clients include BOE, TCL, HKC, Leyard, ,Unilumin, Absen, LG Display, and other domestic and foreign famous panel factories/LED screen factories. Meanwhile the productative widely used in TCL, LG, Samsung, OPPO, vivo, Xiaomi and other domestic and foreign famous terminal enterprises and have gained long-term recognition from many large and well-known clients from the whole value chain in the field of display business.



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SOC SOC Timing control chip - JLogic Al-SoC

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Automotive chip - Automotive Mini LED

Backlight Driver Chip

Automotive Mini LED Direct Display Driver Chip Automotive PMIC Power

Management Chip

touch Chip

Automotive TDDI display

Automotive protocol

conversion Chips

Backlight Chip - Mini / Micro LED Driver Chips - Light Driver integrated LED Driver chip - High-current LED Driver chip chip - LED Display PWM Driver Chips - General LED Driver Chips - LED Display Line Driver Chips - LED Display Control Chips - Mini LED Backlight Driver Chips Large size Display **Driver Chip** - Source display Driver Chip - Gate display Driver Chip Mobile Device Chip - LCD small and medium size display Chip - Fingerprint Chip Touch Chip **Total** Display Control

LED Display &

Product Solutions



Total display control solutions for the whole field

Silicon based OLED display chips

- Micro OLED(ADT) OLED PMIC Product Series LCD PMIC Product Series - OLED Mobile Phone Display Driver Chip - OLED Wearable Display Driver Chip

Chip

OLED Display Driver

- Level shifter product Series - OP Product Series

Power Management

P-Gamma/DVCOM

- Product Series

C

Chip

Products

Mini / Micro LED Driver Chips

Name	Product Introduction	Number of output channels	Built- in MOS	Channel output current	Scanning design	Refresh rate	Current accuracy	GCLK	Packaging
ICND2200	Mini / Micro LED Driver Chips	24	16PMOS	0.5-25mA	1-64 Scan	3840hz+	<±2%	PLL	QFN56
ICND2260	Mini / Micro LED display common cathode driver chip	120	48MOS	0.1-9.6mA	1-96 Scan	3840hz+	<±1%	PLL	BGA225
ICND2270		48	30NMOS	0.25-16mA	1-90 Scan	3840hz+	<±1%	PLL	QFN88

Light driver integrated LED driver chip

ligh-current I ED driver chi

Name	Product Introduction	Output channels	Drive type	Channel output current	Scan	Refresh rate	Current accuracy	GCLK	Packaging
ICND3103	Light driver integrated LED constant current driver chip	3	Common Anode	5/12/ 20mA	/	1	±2.5%	/	/

LED display & backlight chip Solutions

- Mini / Micro LED Driver Chips
- Light driver integrated LED driver chip
- High-current LED driver chip
- LED Display PWM Driver Chips
- General LED Driver Chips
- LED Display Line Driver Chips
- LED Display Control Chips
- Mini LED Backlight Driver Chips

		High-current LED ariver chip								
Name	Product Introduction	Output channels	Channel output current	Scan	Refresh	Current accuracy	GCLK	Packaging		
ICND8309	High current constant cur- rent output LED driver chip	16	2-90mA	1-325	960HZ	±2%	OE	SSOP24/QFN24		
ICND8392	High current constant cur- rent output LED driver chip	16	1-90mA	1-16S	7680Hz	±2%	gclk	SSOP24/QFN24/ TSSOP24/SOP24		
			•							

			L	ED Dis	play P	WM C	Driver	Chips	
Name	Product Introduction	Number of output channels	Drive type	Channel output current	Scanning design	Refresh ratet	Current accuracy (between channels)	GCLK	Packaging
ICND2150S	Constant current	16	Common Anode	0.5-30mA	1-16 Scan	3840hz	<±2%	GCLK	SSOP24
ICND2159	output LED driver chips	16	Common Cathode	0.5-28mA	1-16 Scan	3840hz	<±1.5%	GCLK	SSOP24/QFN24
ICND2153	Constant current output LED	16	Common Anode	0.5-25mA	1-32 Scan	3840hz	<±2%	GCLK	SSOP24/QFN24
ICND2153S	driver chips	16	Common Anode	0.5-30mA	1-32 Scan	3840hz	<±1.5%	PLL	SSOP24/QFN24
ICND2055S	High performance constant current	16	Common Anode	0.5-35mA	1-32 Scan	3840hz+	<±1.5%	PLL	SSOP24/QFN24
ICND2165	output LED driver chip	16	Common Anode	0.5-25mA	1-64 Scan	3840hz+	<±1.5%	PLL	SSOP24/QFN24
ICND3065	High grey level constant current output LED common Anode driver chip	16	Common Anode	0.5-25mA	1-64 Scan	7680hz+	<±1.25%	PLL 200Mhz	SSOP24/QFN24
ICND3069	High grey level constant current output LED common cathode driver chip	16	Common Cathode	0.35-20mA	1-64 Scan	7680hz+	<±1.25%	PLL 200Mhz	SSOP24/QFN24

				General LED Driver Chips					
Name	Product Introduction	Output Channels	Output Current	Scan	Refresh Rate	Current Accuracy	Packaging		
ICND20385		16	0.5-45mA	1-325	1920Hz	±2%	SSOP24/QFN24		
ICND2046	Constant current output LED driver chips	16	0.5-45mA	1-32S	1920Hz	±2%	SSOP24		
ICND2047		16	0.5-45mA	1-64S	3840Hz	±2%	SSOP24		
ICND2049	Constant current output LED common cathode driver chips	16	0.5-25mA	1-32S	1920Hz	±2%	SSOP24		

		LED	Displa	y Line	Driver	Chips
output channels	Channel current	current impedance	Type of decoding	Eliminate ghostlng	Lamp bead protection	Packaging

ICND2013		8	2.5A	100mΩ 138 Decoding		\checkmark	SSOP24/QFN24
ICND2018	Constant current	8	2.5A	100mΩ Serial Decoding	\checkmark	\checkmark	SOP16/QFN16
ICND3018	output LED driver chips	16	2A	130mΩ Serial Decoding	\checkmark	\checkmark	SSOP16/QFN16
ICND3019		16	1.5A	130mΩ Serial Decoding	\checkmark	\checkmark	SSOP16/QFN16

Product Introduction

		LED Display Control Chips							
Name	Product Introduction	Interface	Data sets	Load Carring (Capacity)	Correction	Gamma	HDR	Packaging	Screen type
ICND6603	New LED commercial display control applications scheme, high degree of integration, image algorithm, Strong pro- cessing capacity, high-speed data interface, which can sim- plifies the control system and improves stability	HDMI1.4	40 Groups	960x540	Brightness Chroma		\checkmark	BGA224	2К
Name	Product Introduction	input interfaces	input load	output interface	Output load	SPR	HDR	Packaging	Screen type

	introduction								
ICND6620	4K video cutting processing, strong image algorithm pro- cessing ability, High-speed data interface	HDMI2.0 DP1.4	3840x2160 @60hz	HDMI	960x2160@6	i0hz v	∕ √	BGA216	4K
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			Mini	LED	Backli	ght D	river C	hips	
Name	Product Introduction	Number of channels	Scanning design	Drive current	Channel withstand voltage	Refresh rate	Dimming levels	Current accuracy	Application terminals
ICND8603	High integration, high volt- age withstand, high current, high zonal area dimming, low power consumption, ac- curate contrast ratio, HDR display micture quality.	48	Up to 2 scan	30mA	55V	3840hz	14bit	±2%	TV
ICND8501	display picture quality. Effective brightness en- hancement of LCD panels, colour gamut for high dy- namic contrast ratio.	12	Up to 12 scan	80mA	30V	3840hz	14bit	±2%	NB/MNT

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			Source	Display D	river Chips	
Name	Resolution	Refresh rate	Colour depth	Packaging	Interface	Screen type
ICNL9390S	4k/8K	120/60Hz	8bit	COF	CSPI/iSP	TV/MNT
ICNL9381S	4k/8K	120/60Hz	8bit	COF	CEDS	TV
ICNL9392	4k/8K	120/60Hz	8bit	COF	USI-T	TV
ICNL9391	4k/8K	120/60Hz	8bit	COF	CSP/iSP	TV
ICNL9383	FHD/4K	360Hz	8bit	COF	iSP	MNT
ICNL9351	4K/8K	120/60Hz	8bit	COF	EPI	TV
ICNL9381	UHD	60Hz	8bit	COF	CEDS	TV
ICNL9390	UHD	120/60Hz	8bit	COF	CSP/iSP	TV/MN
ICNL9382	4K/8K	288/120Hz	8bit	COF	СНРІ	TV
ICNL9309	FHD	60Hz	8bit	COF	mini-LVDS	TV/MNT
ICNL9310	FHD/HD	60Hz	8bit	COF	mini-LVDS	TV/MNT
ICNL9312	FHD	60Hz	8bit	COF	mini-LVDS	TV
ICNL9305S	FHD	60Hz	8bit	COF	mini-LVDS	TV
ICNL9308S	FHD	60Hz	6bit	COF	mini-LVDS	MNT
ICNL9350	FHD	60Hz	6bit	COF	EPI	MNT
ICNL9336	FHD	60Hz	6bit	COG	mini-LVDS	NB
ICNL9337	FHD	60Hz	6bit	COG	iSP	NB
ICNL9638	WU	165Hz	8bit	COG	iSP	NB
ICNL9338	FHD	480Hz	8bit	COG	iSP	NB
ICNL9631	FHD	75Hz	8bit	TED	eDP1.2	NB

Large size display driver chip **Solutions**

Products

- Source Display Driver Chips - Gate Display Driver

		Gate Display Driver Chips											
esolution	Refresh rate	Colour depth	Packaging	Interface	Screen typ								
FHD	60Hz	N/A	COF	N/A	TV								
FHD	60Hz	N/A	COF	N/A	TV								
FHD	60Hz	N/A	COF	N/A	MNT								

COG

N/A

60Hz

ICNL9522

ICNL9510

ICNL9513

ICNL9556

HD

N/A

Products

Mobile device chip Solutions

- LCD Small and Medium Size Display Chips
- Fingerprint Chips
- Touch Chips

Application terminals	Package form	Maximum speed	Features	Colour depth	Application size(inch)	Interface protocols	Display refresh rate	olution	Res	Product Introduction	Name
	COG	950Mbps	High refresh rate of 90Hz	8bit	5"-7"	MIPI/SPI	90Hz	720*1760	HD/HD+		ICNL9911C
High screen to-body ratio LCD touch driver panels	COG	1.2Gbps	120Hz high refresh rate narrow bezel low power consumption	8bit	5"-7"	MIPI/SPI	120Hz	720*1760	HD/HD+	Support for display touch all-in-one TDDI technology	ICNL9916
	COG	1.2Gbps	120Hz high refresh rate with narrow bezel	8bit	5"-7"	MIPI/SPI	120Hz	720*1760	HD/HD+		ICNL9916C
LCD touch driver panels	COG/COF	1.3Gbps	144Hz high refresh rate	8bit	5"-7"	MIPI/SPI	120Hz/ 144Hz	1080*2520	FHD/FHD+	Support LTPS display touch all-in-one TDDI technology	ICNL9922C
Tablet	COG/COF	1.2Gbps	Supports 2 cascade/ high brush/ active pen	8bit	8"-12"	MIPI/SPI	120Hz	800*1280*2	WXGA+	Support for display	ICNL9951R
related products	COG/COF	1.2Gbps	Supports 2 cascade/ high brush/ active pen/ narrow bezel technology	8bit	8"-13"	MIPI/SPI	120Hz/ 144Hz	800*1280*2	WXGA+	touch all-in-one TDDI technology	ICNL9952
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			******	<u> </u>		Fin	gerprint	Chips	
/	Name	Product Introduction	Packagin	g Shape	Sensing area	Aera Array	Communication methods	Supply voltage	Communication Electrical Level
	ICNF7318	2.1mm side fingerprint	LGA	Rectangle	1.6mm*6.6mm	38*155@598dpi	SPI	2.8V~3.3V	1.8V
	ICNF7319		LGA	Rectangle	1.6mm*8.0mm	38*188@598dpi	SPI	2.8V~3.3V	1.8V
	ICNF6156	optical Under- Display fingerprint	СОВ	/	1.8mm*8.0mm	172*216@7.2um	SPI	2.8V~3.3V	1.8V/VDD
	ICNF7339	Back fingerprint	LGA	Round Square	e 2.72mm*3.4mm	64*80@598dpi	SPI	2.8V~3.3V	1.8V/VDD
	ICNF7332	industry fingerprint	LGA	Round Square	e 3.2mm*4.0mm	64*80@508dpi	SPI	2.8V~3.3V	1.8V/VDD
	ICNF7352	industry fingerprint	LGA	Round Square	e 4.4mm*5.6mm	88*112@508dpi	SPI	2.8V~3.3V	1.8V/VDD
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OLED Mobile Phone Display Driver Chips

Name	Product Introduction	Resolution	Refresh rate	LTPO/LTPS	RAM	Interface	Packaging
ICNA3512	Supports high refresh, low power, cascade, CUP Delivered in volume production	1280*2800 (FHD+)	FHD+@144Hz	LTPO/LTPS	Dual RAM	MIPI-C phy/-D phy	СОР
ICNA3511A	High refresh OLED mobile phone display driver chip	1280*2560/ 1200*2800 (FHD+)	FHD+ @120Hz	LTPS	Dual RAM	MIPI-C phy/-D phy	COP
ICNA3520	High refresh, low power consumption, cascade, CUP	1284*2800 (FHD+)	FHD+@144Hz	LTPO/LTPS	Dual RAM	MIPI-C phy/-D phy	СОР
ICNA3508A	High refresh	1080*2520 (FHD+) 1280*2800(FHD+)	FHD+@144Hz	LTPS	Single RAM	MIPI-D phy	COP
ICNA3508	and small size	1080*2520 (FHD+)	FHD+@144Hz	LTPS	Single RAM	MIPI-D phy	COP

OLED display driver chip Solutions

Products

- OLED Mobile Phone Display Driver Chips
- OLED Wearable Display Driver Chips

OLED Wearable Display Driver Chips

Name	Introduction	Resolution	Refresh rate	Features	Interface	Packaging	Application terminals
ICNA3310	OLED wearable watch/smart band	480RGB*480	1~60Hz, step1Hz	Round/Notch、SCC	MIPI-D phy SPI/QSPI/MCU	COF	Watch wearable devices
ICNA3311	display driver chip	480RGB*480	1~60Hz, step1Hz	Round/Notch、 SCC、CGM、PCD	MIPI-D phy SPI/QSPI/MCU	COF	Watch wearable devices
ICNA3306	OLED wearable smart band display driver chip	240RGB*360	1~60Hz, step1Hz	Round/Notch、 SCC、CGM、PCD	MIPI-D phy SPI/QSPI/MCU	COG/COF	Wristband wearables
ICNA3320	OLED High-end TDDI wearable display driver chip	480RGB*480+	0.1~60Hz, step0.1Hz	LTPO/LTPS Smart AOD	MIPI-D phy SPI/QSPI/MCU	COP/COF	Smart Home Watch wearable devices
ICNA3312	OLED High-end wearable display driver chip	480RGB*480+	0.1~60Hz, step0.1Hz	LTPO/LTPS Smart AOD	MIPI-D phy SPI/QSPI/MCU	COP/COF	Smart Home Watch wearable devices

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Power Management Chip Solutions

- PMIC Product

Products

LCD PMIC Product

OLED PMIC Product

- P-Gamma / DVCOM Product

- Level Shifter Product

- OP Product

		PN	ЛС			LCD PMI	C Pi	odu	ıct	Range	
Name	Product Introduction	Input voltage range	AVDD output voltage range	Number of DVDD channels	HAVDD architecture	VGH/VGL e architecture	Number of VCOM channels	Number of Gamma channels	Level shifter	Packaging	Application terminals
iML8209	LCD Mobile Bias PMU	2.5~4.8V	±4.5~6V	NA	NA	NA	NA	NA	NA	DFN12-2.4x1.5	LCD Mobile
ICN68116	LCD Tablet	2.7~5.5V	±4~6.5V	NA	NA	NA	NA	NA	NA	WCSP	LCD Tablet
iML7525	Bias PMU	2.7~5.5V	±4~6.5V	NA	NA	NA	NA	NA	NA	DFN12-3x3	LED TUDICI
iML8875		2.5~5.5V	4.5~11V	1CH	OP	NA	1CH	NA	NA	TQFN20-4X4	
iML8882	LCD NB/Tablet Bias PMU	2.5~5.5V	±4~6.5V	2CH	NA	CP/CP	1CH	NA	NA	WQFN28-3.5x5.5	LCD NB/Table
iML8884		2.5-5.5V	7~13.5V	3CH	OP	Bridge	1CH	2CH	NA	FCQFN28-3.5x3.5	LCD NB/Table
iML8999	LCD NB/Tablet Bias PMU 2in1 PMIC+P-Gamma	2.5~5.5V	7~13.5V	3CH	OP	Boost/CP	1CH	2CH	NA	FCQFN28-3.5x3.5	LCD NB/Tablet
iML8997	LCD NB/Tablet Bias PMU 3in1 PMIC+P-Gamma+ Level Shifter	2.8~6V	7.5~11.5V	3CH	OP	Bridge	1CH	2CH	8CH	QFN42-3.5x9	LCD NB/Table
iML8940	LCD TV/MNT	8~14V	13.5~18.4V	2CH	Buck	CP/CP	NA	NA	NA	TQFN40-6x6	
iML8943	Bias PMU	9~14V	13.69~19.02\	/ 2CH	OP	VGH: Boost/CP VGL:Inverting/CF	, NA	NA	NA	VQFN40-5x5	LCD TV/MNT
iML8973B		8~18V	13.5~19.8V	1CH	Buck	CP/CP	1CH	10CH	NA	TQFN40-5x5	
iML8982A	LCD TV/MNT	8.6~14.7V	11~18V	3CH	Buck	Boost/Inverting	1CH	4CH	NA	WQFN52-6x6	LCD TV/MNT
iML8974A	Bias PMU 2in1 PMIC+P-Gamma	8.6~14.7V	13.5~19.8V	3CH	Buck	Boost/Inverting	1CH	4CH	NA	WQFN52-6x6	
iML8947		8.6~14.7/ 4.3~6V	13.5~19.8V	1CH	Buck	VGH: Boost/CP VGL: Inverting/CP	2CH	14CH	NA	QFN4.5*6.5	
iML8978		8~14.7V	11~19.2V	3CH	Buck	CP/CP	3CH	14CH	NA	VQFN56-7x7	
iML1946/A	LCD TV/MNT Bias PMU 3in1 PMIC+P-Gamma+ Level Shifter	8~18V	13~19.2V	3CH	Buck	Boost/Inverting	3CH	19CH	12CH	QFN82-12x8	LCD TV/MN1
iML1976A		8~14.7V	13~19.2V	3CH	Buck	CP/CP	3CH	14CH	12CH	VQFN72-8x8	

8~18V 13~19.2V 3CH Buck Boost/Inverting 3CH 14CH 19CH QFN82-12x8

iML8948

				Lev	el Shi	fter Pr	oduc	t Ran	ge	
Name	Product Introduction	VGH/VGL working range	DVDD working range	Clock Phase	Charge sharing	ОСР	Rising Slew Rate	Falling Slew Rate	Communication protocols	Packaging
iML7263	14CH High voltage Level Shifter output	-20~35V	NA	8Phase	supporting	supporting	50V/us	50V/us	NA	QFN28-4X4
iML7264	8CH High voltage Level Shifter output	-15~40V	NA	4Phase	supporting	supporting	95V/us	95V/us	NA	QFN24-3x3
iML7278	13CH High voltage Level Shifter output	-15~40V	2.6~5.5V	8Phase	NA	supporting	60V/us	1000V/us	NA	QFN32-4x4
iML7282	14CH High voltage Level Shifter output	-20~45V	2.6~5.5V	8Phase	supporting	supporting	1000V/us	60V/us	I2C	QFN32-4x4
iML7272A/B	16CH High voltage Level Shifter output	-18~40V	2.6~5.5V	10Phase	NA	supporting		1000V/us	I2C	QFN32-4x4

				OP P	roduc	t Rang	ge		
Name	Product Introduction	AVDD voltage range	Number of channels	Peak drive current	Static current / Per CH	Slew Rate	BW	ESD-HBM	Packaging
iML7811	Single channel	5~20V	1CH	320mA	1.5mA	20V/us	40MHz	2KV	TDFN/MSOP
iML2211	operational amplifiers	5~20V	1CH	2000mA	5mA	40V/us	35MHz	4KV	TDFN/MSOP
iML2122	Dual channel	5~20V	2CH	600mA	1.2mA	50V/us	30MHz	2KV	TDFN/MSOP
iML2228	operational amplifiers	4.5~19V	4CH	1300mA	3mA	45V/us	35MHz	4KV	TDFN/MSOP
iML2240		4.5~20V	4CH	600mA	1.6mA	30V/us	35MHz	4KV	TSSOP13
iML2240B	Four channel operational amplifiers	4.5~20V	4CH	1000mA	3mA				TSSOP14
iML2242		4.5~20V	4CH	1300mA	3mA	45V/us	35MHz	4KV	TSSOP14

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		PM	C		OLE	D PM	IC Pr	oduc	t Ra	nge	
Name	Product Introduction	Application terminals	Input voltage range	ELVDD output voltage range	ELVSS output voltage range	Maximum load carrying capacity	AVDD output voltage range	AVDD load carrying capacity	VINT output voltage range	VINT load carrying capacity	Packaging
iML7522		Wearable	2.9~5.5V	2.8~5.3V	-0.6~-5V	80mA	NA	NA	NA	NA	WLCSP-16
iML7524		Mobile	2.9~5V	4.6V	-1.4~-6V	600mA	6.9~7.9V	150mA	NA	NA	WLCSP-25
iML7526	AMOLED PMU	Mobile	2.9~5V	4.6~5V	-1.4~-6V	650mA	5.5~7.9V	150mA	NA	NA	WLCSP-36
iML7531	AWOLD FMU	Mobile/Tablet	2.9~4.6V	4.6~5V	-1.4~-6V	1000mA	5.5~7.9V	100mA	NA	NA	WQFN32-4x4
iML7533		NB	6V/8~21V	4~5.5V	-2~-6V	2000mA	5.5~7.6V	300mA	-2~-6V	50mA	QFN40-3.5x6.5
iML7537		NB	6V/8~21V	2.4~5.4V	-6~-12V	2000mA@ ELVSS=-6V; 1000mA@ ELVSS=-12V		300mA	-2~-6V	50mA	QFN40-3.5x6.5

		P-Gamma/DVCOM Product Range								
Name	Product Introduction	AVDD working range	DVDD Working range	Number of Gamma channels	Gamma load carrying capacity	Number of VCOM channels	VCOM load carrying capacity	Communication protocols	Packaging	Application terminals
iML7924C	14CH 10Bit P-Gamma 1CH 7Bit P-VCOM	6.5~18V	2.9~3.6V	14CH	75mA	1CH	140mA	I2C	TQFN24-4x4	LCD NB/MNT/TV
iML7942	4CH 10Bit P-Gamma 1CH 10Bit P-VCOM	9~20V	2.7~3.6V	4CH	NA	1CH	NA	I2C	TQFN20-4x4	LCD NB/MNT/TV
iML7972B	7Bit 1CH P-VCOM	6~18V	2.6~3.6V	NA	NA	1CH	250mA	I2C	DFN8-3x3	LCD NB/MNT/TV

roducts					Micr	o OLED (ADT)		
	Name	Product Introduction	Zone AA dimensions	Resolution	PPI	Interface	Maximum frame rate	Maximum brightness	Maximu voltag
	ICNU1210	0.5inch 1600RGB x 1200	0.5 inch	1600x1200	4,032	MIPI DPHY	120Hz	3,000nit	8V
	ICNU1510	1.3inch 3552RGB x 3840	1.3 inch	3552x3840	4,032	MIPI DPHY+CPHY	90Hz	5,000nit	8V
	ICNU1218	0.49inch 16000RGB x 1200	0.49 inch	1600x1200	4,032	MIPI DPHY	120Hz	3,000nit	8V
	ICNU1221	0.49inch 1920RGB x 1080	0.49 inch	1920x1200	4,536	MIPI DPHY	120Hz	3,000nit	8V
Si-based OLED				•	•	0			
display chips Solutions			۲ ۵					z./////	
- Micro OLED (ADT)									
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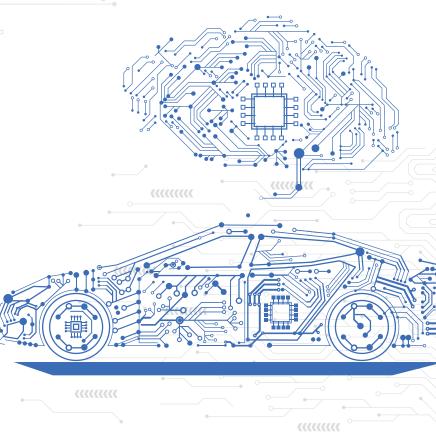
Automotive Display Solution

Name	Introductions	Application	Features	Interfaces	Resolution
ICNM7801Q	Automotive bridge Bridge chip with local dimming dynamic dimming algorithm and OSD menu	Central control screen Dashboard screen	The first domestic automotive bridge chip, self-developed local dimming algorithm	/	8K1K, two cascades can support 16K1K
ICNL9971	Automotive TDDI	Central control screen Dashboard screen	Domestic TDDI driver chips	Support A-SI/LTPS/IGZO LCD 3 chips cascade, LVDS interface TDDI chip AEC-Q100 Grade2	/
IML9880	Automotive PMIC	LCD screen power	High efficiency high load and high voltage specifications	support positive and negative voltage 15V high conversion efficiency and is used in LCD display Pass AEC-Q100 Grade2	/
ICND7001	Automotive LED driver	LED direct display and miniLED backlight driver chip	Domestic LED driver chips	Support 48 channel output used in headlights, flowing lights taillights and other applications 16bit dimming Pass AEC—Q100	

Automotive chip

Products

- Automotive Mini LED Backlight Driver Chip
- Automotive Mini LED Direct Display Driver Chip
- Automotive PMIC Power Management Chip
- Automotive TDDI display touch chip
- Automotive protocol conversion chips



						SOC			
Name	Introduction	Application	Features	Interfaces	HDR	Converter	OD	Refreshrate	Resolution
ICNM8001	Monitor scaler IC for QHD panel	Destop monitor/ Portable monitor/ Industrial monitor Adapter	multi high-speed interfaces	input: HDMI 2.0/DP 1.4/ Audio output:LVDS eDP 1.4	HDR10	1	V	75Hz	QHD (2560*1440
ICNM8501	Monitor scaler IC for 4K panel	Destop monitor/ Portable monitor/ Industrial monitor Adapter	multi high-speed interfaces	input: HDMI 2.0/DP 1.4/ Audio output:LVDS eDP 1.4	HDR10	\checkmark	\checkmark	3840*2160 @60Hz 1920*1080 @144~240Hz	4K (3840*216
ICNM7401	Monitor scaler IC for FHD panel	Destop monitor/ Portable monitor/ Industrial monitor Adapter	iligii-speeu	input: HDMI 1.4/DP1.2/VGA output : LVDS	HDR10	V	\checkmark	100Hz	FHD (1920*120
ICNM7301	Converter IC HDMI to VGA	Adapter Cable	Video transfer/ Small area/ Low consumption	input: HDMI 1.4 output: VGA	/	/	/	60Hz	FHD (1920*120

Timing control chip

Name	Resolution	Refreshrate	Color depth	Packaging	Interfaces	Screen Types
ICNC65	1366*768	60Hz	6/8bit	QFN48	input:LVDS ouput:mini-LVDS	TV
ICNC66	1920*1200	100Hz	6/8bit	QFN68	input:LVDS ouput:mini-LVDS	TV
ICNC81	1920*1200	100Hz	6/8bit	TQFP64	input:LVDS ouput:mini-LVDS	MNT

JLogic Al-SoC

				JEUgic Al-JUC					
Name	Production	Resolution	Field	Internal operational unit	HD video Interfaces	AI algorithms			
JLV2600	new generation of AI-PQ image quality enhancement processor	4K @144Hz 8K @ 60Hz	Smart display, machine vision, medical imaging equipment, edge computing, large-screen control, vehicle CMS, etc	Image Computing Unit: 1) Six-core NNE engine, 32T 2) Dual-core DSP engine 3) Video codec: H.264/H.265, 4K120fps	Video Input Interface: 1) MIPI_CSI 1~4 channels, 4K60Hz maximum 2) Dual DP1.4/eDP, 4K144/ 8K60Hz maximum 3) VBO-like interface, 16Lane, 4K144Hz maximum	 AI-PQ image quality enhancement: AI-ISP, infinite scaling, Local Dimming, HDR, etc AI detection and recognition: medical auxiliary diagnosis, defect detection, etc 			
				•					

SOC

Products

- SOC
- Timing control chip
- JLogic Al-SoC

Development History

2008

Sep. Established

2009

Oct. Launched mobile phone charger power supply chip ICN3030

2010

Jun. Launched LED driver chip ICN2024

2011

- Apr. Launched the industry's advanced self-inductance plus mutual inductance touch chips ICN8201 and ICN8211
- May. Passed ISO9001 quality management system certification

2012-2013

2012

Dec. LED driver chip project won "Beijing Science and Technology Award"

2014-2015

2013

Oct. ICN2024 driver chip was listed in the National Key New Product List

 Nov. Touch chip ICN85 series were launched

2014

2015

Sep. ICN85xx series won the "ACE Award for

Outstanding Product of the Year".

Oct. Launched AMOLED driver chip ICN9605

identification chip ICNT71 series

ceremony in Tiananmen Square

Sep. ICND2026 driver chip successfully lit up the

LED outdoor large screen of the military parade

Dec. Sales exceeded 100 million RMB

Jun. The first domestic HD A-Si LCD driver chip ICN9706 was launched

Aug. Launched fingerprint

2016

- **2016** Jan. The first LFHD TPS LCD driver chip ICN9820 was launched in China
- Apr. Launched the industry's advanced small area array fingerprint identification solution ICNT7152
- Jun. Launched LED small pitch PWM constant current driver ICN2053
- Jul. The first TDDI chip ICNL9920 was launched in China
- Nov. Acquired iML, a US-based power management chip design company
- **Dec.** LED display driver chips lead the world in terms of market share

o **2017**

May. Launched the international advanced integrated P-Gamma single-chip TV display solution iML1998

Sep. Launched the industry's most advanced TDDI chip ICNL9911supporting full screen, which was awarded the "China Patent Excellence Award"

2018

2019-2020

2017-2018

Feb. ICN2050 driver chip lit up CCTV Spring Festival Gala screen

- Mar. Awarded "China Display Industry Chain Outstanding Contribution Award"
- Jun. TDDI chips are first to be mass produced
- Oct. Awarded "Postdoctoral Research Station"
- Nov. The world's first LED flight simulator equipped with ICND2055 driver chip was unveiled at the Zhuhai Air Show , ICNF7332 supported China Mobile N5 launch
- Dec. Awarded "The Fifth Beijing Invention Patent Award"

2021

- Jun. TDDI chip won the SID Gold Award for Best Display Module Product, Ultra High Resolution AMOLED Power Management Chip won the SID Gold Award for Best Innovative Display Application Technology
- Jul. ICND2153 driver chip light up the giant screen for the 100th anniversary of the founding of the CPC Party

2022

Feb. ICND2153 and ICND2055 LED driver chips light up the LED stage of Bird's Nest in the Winter Olympics Invested in Silang, Established JV Jilang

2023

- Apr. LED/OLED/SoC/Local Dimming Display Driver IC Won ICDT 2023 "Best Innovative Display Component of the Year Award" LED display chip won the ISLE Exhibition Excellent Product Award and Rising Star Product Award
- Aug. Awarded Gold Award for Display Materials Innovation on DIC 2023

2019

Mar. The optical fingerprint solution under the large-area OLED screen won the "SID Best Innovative Display Component Award"

2021-2023

- Jul. ICND2069+ICND2019 supports 8K Micro LED TV
- Sep. 10 million ICND2055 driver chips successfully lit up Tiananmen Square parade screen for the 70th anniversary of the National Day
- **Dec.** Awarded "Manufacturing Single Champion Demonstration Enterprise" by the Ministry of Industry and Information Technology of PRC

2020

- Mar. Awarded "Second Prize of Technology by Beijing Municipal Science & Technology Commission"
- Aug. 8K LCD driver chip won the "SID Best Innovative Display Component Gold Award" TDDI chip won the "SID Best Display Component Product Silver Award"
- Sep. First P2P TV driver chip ICNL9390 was researched and developed in China