



指纹传感器

屏下 (OLED) 光学指纹传感器

兆易创新提供领先的单芯片架构，针对OLED屏下低照度应用定制Pixel和镜头设计，支持小尺寸模组和低透过率屏幕。



主要特性

- ◆ 屏内指纹识别，支持 OLED 软屏和硬屏
- ◆ $FRR \leq 1.5\% @ FAR \leq 1/50,000$
- ◆ Enroll times ≤ 12 次
- ◆ 360 度均可识别

CCM传感器

- ◆ 定制化像素电路及工艺设计，以应用于低光照屏下指纹
- ◆ 领先的单芯片架构
- ◆ 定制化镜头设计，与定制像素搭配，获取高清晰度指纹图像
- ◆ 支持无FLASH
- ◆ 首家在屏下指纹商用CSP方案

屏下 (OLED) 光学指纹传感器

Part No.	No. of Channels	Multi-Touch Points
GSL7000A	6.0 x 6.0 mm	320 x 320
GSL7001A	6.0 x 6.0 mm	250 x 250
GSL7002A	7.0 x 7.0 mm	200 x 200

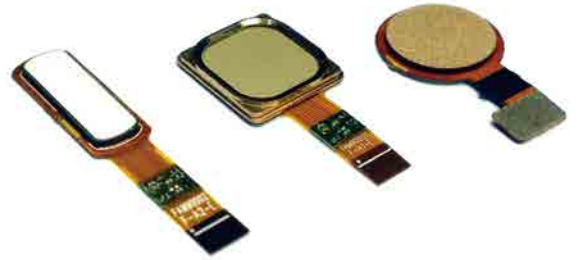


电容指纹识别传感器

兆易创新电容指纹识别传感器拥有适配模式/特征点多种识别算法，根据不同指纹自动调整传感器配置，确保图像的高清晰度。紧凑的组件设计允许多种形状封装，无需金属环即可获得高清晰度指纹图像，适合于手机等各种应用设备。

主要特性

- ◆ 支持各种形状及尺寸：圆形、方形、长条形等，尤其有超窄尺寸
- ◆ 支持放置在智能手机正面/背面/侧边等不同位置
- ◆ 支持不同表面处理工艺：哑光/高光/陶瓷盖板/玻璃盖板等
- ◆ 高灵敏度设计，高信噪比设计，可获取高清晰度的指纹图像
- ◆ 图像为8bit精度，256阶灰阶，分辨率高达508DPI
- ◆ 支持标准SPI接口
- ◆ FRR<2% @ FAR 1/50000



电学特性

- ◆ 电源电压 (AVDD) : 2.8V~3.6V;
- ◆ 输入/输出端口电压 (VDDIO) : 1.8V~AVDD;
- ◆ 功耗:
图像扫描模式 (扫描帧率>20F/s或自定义): 8.5mA (可配置)
深度睡眠模式: 30~100μA

可靠性

- ◆ 传感器 ESD 性能: 空气放电: ±15.0 kV;
接触放电: ±8.0 kV
- ◆ 传感器 Latch-up 性能: ±400.0mA

电容指纹识别传感器

Part No.	Type	Position	LGA Size / Square	LGA Size / Round	Sensing Size	Pixel Array
GSL6157N	Matte / Glossy Coating	Side-Mounted	14.3x2.4mm		8 x 1.8mm	160 x 36
GSL6159N	Matte / Glossy Coating	Side-Mounted	13.5x2.12mm		8 x 1.6mm	160 x 32
GSL6157R	Matte / Glossy Coating	Curved Side-Mounted	14.3x2.4mm		8 x 1.8mm	160 x 36
GSL6191N	Matte / Glossy Coating	Side-Mounted	14.3x2.4 ~ 13.5x2.12mm		6.6 x 1.6mm	132 x 32
GSL6192	Matte / Glossy Coating	Side-Mounted	13.5x1.8mm		8x1.3mm	180 x 30
GSL6193	Matte / Glossy Coating	Side-Mounted	14.3x2.4 ~ 13.5x2.12mm		5.9 x 1.6mm	118 x 32
GSL6150N	Matte / Glossy Coating	Back-Mounted	Max:12x12mm Min:7.5x7.5mm	Max:φ12mm Min:φ8.5mm	4.0 x 3.2 mm	80 x 64
GSL6135N	Matte / Glossy Coating	Back-Mounted	Max:12x12mm Min:7.5x7.5mm	Max:φ12mm Min:φ8.5mm	3.2 x 3.2 mm	64 x 64
GSL6182GS1	Matte / Glossy Coating	Smart door lock	Max:15x15mm Min:12.5x12.5mm	Max:φ15mm Min:φ12.5mm	5.7 x 6.6 mm	128 x 112
GSL6186	Matte / Glossy Coating	Smart door lock	Max:13x13mm Min:10.5x10.5mm	Max:φ13mm Min:φ10.5mm	6.4 x 3.2 mm	128 x 64
GSL6186C1	Matte / Glossy Coating	PC	Max:13x13mm Min:10.5x10.5mm	Max:φ13mm Min:φ10.5mm	4.0 x 3.2 mm	80 x 64





电容触控芯片

兆易创新电容触控芯片拥有极强的抗RF、Display和电源干扰能力，可根据温度和湿度变化自动调节、实时补偿。触控面板的创“芯”之选。

- ◆ 极强的抗 RF，LCD 和电源干扰能力
- ◆ 同时探测多达 10 个触摸点
- ◆ 面板厚度：可支持最厚达2.5mm玻璃盖板，
- ◆ 可支持最厚达1.2mm塑料盖板
- ◆ I2C兼容从属模式，400KHz
- ◆ I/O 接口兼容 1.8/3.3 V

极强抗干扰能力



自动调屏&校准



多触点探测



手机触控芯片

Part No.	No. of Channels	Multi-Touch Points	Panel Dimension	TP Compatible Mode	Value Proposition	Package
GSL1691	18TX, 12RX	5 points	up to 7"	Tx line Floating	Support single layer and multi-touch, high cost effectiveness	QFN40
GSL2681	23TX, 12RX	5 points	up to 7"	Tx line Floating	Support single layer and multi-touch, high performance	QFN48
GSL915	26TX, 14RX	5 points	up to 7"	GPIO(9 mode) + Tx line Floating	Support single layer and multi-touch, high performance	QFN52
GSL2338	40 RX	2 points	up to 5.5"	Rx line Floating	Self-capacitance, high cost effectiveness	QFN48

平板触控芯片

Part No.	No. of Channels	Multi-Touch Points	Panel Dimension	TP Compatible Mode	Value Proposition	Package
GSL1680	16TX, 10RX	5~10 point	up to 7"	GPIO(2 modes)+ Tx line floating	Support single layer and multi-touch, high cost effectiveness	QFN40
GSL1686	16TX, 10RX	5~10 point	up to 7"	GPIO(2 modes)+ Tx line floating	Support single layer and multi-touch, high cost effectiveness, compatible with GSL1680	QFN40
GSL2681	23TX, 12RX	5~10 point	up to 8"	Tx line floating	Support single layer and multi-touch, high cost effectiveness	QFN48
GSL3670	26TX, 14RX	5~10 point	up to 10.1"	GPIO(9 modes)+ Tx line floating	Support single layer and multi-touch, high cost effectiveness	QFN52
GSL3676	28TX, 18RX	5~10 point	up to 10.1"	Tx line floating	Support single layer and multi-touch, big panel size	QFN56
GSL3680	31TX, 20RX	5~10 point	up to 13.5"	GPIO(8 modes)+ Tx line floating	Support single layer and multi-touch, big panel size	QFN68
GSL3692	32TX, 24RX	5~10 point	up to 13.5"	GPIO(6 modes)+ Tx line floating	Support single layer and multi-touch, big panel size	QFN68
GSL5680	40TX, 32RX	5~10 point	up to 15.6"	GPIO(9 modes)+ Tx line floating	Support single layer and multi-touch, big panel size	QFN88

