广告位

安防监控摄像头购买/电气智能化工程安装可联系-超低价

无线AP覆盖/音响安装/智慧门禁/车牌识别

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廉价版智能沙盘/展厅移动机器人可联系

山西本地特种车辆租赁/混凝土/买车买房/抵押贷款需要可联系

办理各类企业/工程师人工智能工信部证书可联系（包过一条龙）

高光谱相机/100kg大型吊装无人机购买可联系

山西本地无人机高空清洗作业可联系/数字人视频生成

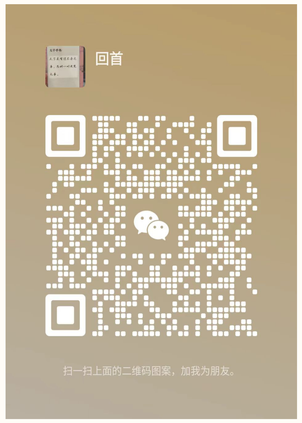
ERP沙盘模拟赛可dd/高校实验室装修/化工电子类实验设备

项目科技查新/双软评估/科小认证等包过一条龙可联系

企业代理记账/知识产权代缴/企业科技项目申报可联系

中国创翼创业创新大赛等各类企业创赛可代做（PPT/申报书/知识产权一条龙）

有以上需要均可dd我，介绍人来给提成！



办证

认证企业	方向	周期/方式	证书实物图
英伟达NVIDIA认证	人工智能计算证书	一周内全包下证	
腾讯云	交付工程师	一周内全包下证	
	云计算技能认证 区块链从业认证		
	腾讯高级工程师-数据库产品认证		
华为云	鲲鹏/华为云 技能认证	一周内全包下证	
	开发者工作级认证		
	大数据技能认证 hicp证书		
	openGauss数据库开发者证书		

项目类别	认证专业
商务管理类	人力资源管理师
	风险管理师
	项目管理师
	物联网管理师
	新媒体运营师
	大数据分析师
	互联网营销师
	数字经济管理师
	电子商务师
	电子政务师
	社会工作师
医疗防疫公共卫生类	消毒员
	公共场所卫生管理员
美学艺术类	化妆品测评师
	新媒体主播
	美业培训师
	美容院管理师
	摄影摄像与后期制作
经贸管理类	酒店经营管理师
	理财规划制师
	连锁经营管理师
	双碳管理师
	财务税务管理师
	工商企业管理师
	公共关系管理师
	微商经营管理师
	市场营销师
	劳动关系协调师
	计算机信息技术
	企业培训师
	管理会计师
	中式京调师
	中式面点师

以下说明来源为数据手册内容

KX132-1211 性能参数

(specifications are for operation at 2.5V and T = 25C unless stated otherwise)

Parameters		Units	Min	Typical	Max
Operating Temperature Range		°C	-40		+105
Zero-g Offset		mg		±25	±90
Zero-g Offset Variation from RT over Temp.		mg/°C		0.25	
Sensitivity[1] (16 bit)	GSEL1=0, GSEL0=0 (±2g)	counts/g	15401	16384	17367
	GSEL1=0, GSEL0=1 (±4g)		7700	8192	8684
	GSEL1=1, GSEL0=0 (±8g)		3850	4096	4342
	GSEL1=1, GSEL0=1 (±16g)		1925	2048	2171
Sensitivity (Buffer 8-bit mode)[1,2]	GSEL1=0, GSEL0=0 (±2g)	counts/g		64	
	GSEL1=0, GSEL0=1 (±4g)			32	
	GSEL1=1, GSEL0=0 (±8g)			16	
	GSEL1=1, GSEL0=1 (±16g)				
Sensitivity Variation from RT over Temperature		%/°C		0.01 (xy) 0.03 (z)	
Positive Self-Test Output change on Activation		g	0.25 (xy) 0.2 (z)	0.5	0.75
Mechanical Signal Bandwidth (-3dB)[3]		Hz		4200 (xy) 2900 (z)	
Non-Linearity		% of FS		0.5	
Cross Axis Sensitivity		%		2	
Noise[4]	RMS	mg		0.7	
	Density	µg/√Hz		130	

Table 1: Mechanical Specifications

Notes:

1. Resolution and acceleration ranges are user selectable via I²C or SPI. Tolerance specified at ±1g stimulus.
2. Sensitivity is proportional to BRES in BUF_CNTL2.
3. Signal bandwidth varies with Output Data Rate (ODR), and Low Pass Filter setting. Measured with ODR = 25600Hz, LPRO = 1 settings.
4. Noise varies with ODR, power mode, and the Average Filter Control (AVC) settings. Measured with RES = 1, ODR = 50Hz, LPRO = 1, GSEL = 0 settings.

KX132-1211 电气参数

Electrical

(specifications are for operation at 2.5V and T = 25C unless stated otherwise)

Parameters		Units	Min	Typical	Max
Supply Voltage (VDD)	Operating	V	1.7	2.5	3.6
I/O Pads Supply Voltage (IO_VDD)	SPI, I²C (Fast/Standard mode)	V	1.2		3.6
	I²C (High Speed mode)		1.7		3.6
Current Consumption (Accelerometer Only)	Operating (High Performance with Wake-up Detection) ODR=400Hz	µA		148	
	Operating (Low power with Wake-up detection) ODR=0.781Hz			0.53	
	Operating (Low Power with Wake-up detection plus Advanced Data Path) ODR=0.781Hz			0.67	
Standby Current Consumption		µA		0.5	
Output Low Voltage (V_{OL})[1,2]	(IO_VDD = 2V)	V	-	-	0.2 * IO_VDD
	(IO_VDD ≥ 2V)	V	-	-	0.4
Output High Voltage (V_{OH})		V	0.8 * IO_VDD	-	-
Input Low Voltage (V_{IL})		V	-	-	0.2 * IO_VDD
Input High Voltage (V_{IH})		V	0.8 * IO_VDD	-	-
Start Up Time[3]		ms	2	-	1300
Power Up Time[4]		ms		20	50
SPI Communication Rate		MHz			10
I²C Communication Rate		MHz			0.4 3.4
I²C Slave Address (7-bit)				0x1E / 0x1F	
WHO_AM_I register value				0x3D	
Output Data Rate (ODR)[5]		Hz	0.781	50	25600
Output Signal Bandwidth (-3dB)[6]		Hz		ODR/9 or ODR/2	

Table 2: Electrical Specifications

Notes:

1. Current varies with Output Data Rate (ODR) as shown in Figure 2, types and number of enabled digital engines, the average filter control settings, and VDD. Measured with OWUF<2:0> = 0, OSA<3:0> = 0, AVC<2:0> = 1, LPSTPSEL = 1.
2. For I²C communication, this assumes a minimum 1.5kΩ pull-up resistor on SCL and SDA pins.
3. Start up time is from PC1 set to valid outputs. Time varies with ODR, Power Mode, and FSTUP bit setting (see Figure 1).
4. Power up time is from VDD valid to device boot completion.
5. Typical values. ODR is user-selectable via I²C or SPI. See ODCNTL register for details.
6. Refers to accelerometer's raw output data. Additional bandwidth control is available using the Advanced Data Path (ADP) engine.
7. Measured with RMS_AVC<2:0> = 1, OADP<3:0> = 0, LPSTPSEL = 0.

版本记录

V1.0.0版本-2026/03/09-零高幸：初版完成设计

以下说明来源为数据手册内容

ADS1219IPWR简介

Product Description

The KX132-1211 is a tri-axis ±2g, ±4g, ±8g, or ±16g silicon micromachined accelerometer featuring a user-configurable 3-stage Advanced Data Path (ADP) consisting of a low-pass filter, low-pass/high-pass filter, and RMS calculation engine. The KX132-1211 accelerometer also features an advanced Wake-Up and Back-to-Sleep detection with a high-resolution threshold capability configurable down to 3.9 mg, 512-byte buffer that continues to record data even when being read, as well as embedded engines for orientation, Directional-Tap™/Double-Tap™, and Free fall detection. The sense element is fabricated using Kionix's proprietary plasma micromachining process technology. Acceleration sensing is based on the principle of a differential capacitance arising from acceleration-induced motion of the sense element, which further utilizes common mode cancellation to decrease errors from process variation, temperature, and environmental stress. The sense element is hermetically sealed at the wafer level by bonding a second silicon lid wafer to the device wafer. A separate ASIC device packaged with the sense element provides signal conditioning and intelligent user-programmable application algorithms. The KX132-1211 accelerometers offer lower noise and improved linearity over of the entire temperature range. The accelerometer is delivered in a 2 x 2 x 0.9 mm LGA 12-pin plastic package operating from a 1.7V – 3.6V (VDD) / 1.2V – 3.6V (IO_VDD) DC supplies. Internal voltage regulators are used to maintain constant internal operating voltages over the range of input supply voltages. This results in stable operating characteristics even if the supply voltage changes. I²C or SPI digital protocol is supported to configure the chip, read acceleration outputs, and check for updates to the orientation, Directional-Tap™/Double-Tap™ detection, Free fall detection, and activity monitoring algorithms. Two configurable interrupt pins are also available to show the output of the embedded detection algorithms.

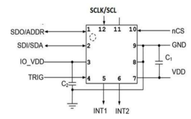


Features

- Operating temperature range from -40°C to +105°C
- Small footprint: 2 x 2 x 0.9 mm LGA 12-pin package
- User-configurable g-range up to ±16g and Output Data Rate up to 25600Hz
- A user-configurable 3-stage Advanced Data Path (ADP) consisting of a low-pass filter, low-pass/high-pass filter, and RMS calculation engine
- High resolution Wake-Up / Back-to-Sleep functions with threshold configurable down to 3.9 mg
- User accessible manufacturer and part ID registers
- Self-test Function
- Integrated Free fall, Directional-Tap™ / Double-Tap™, and Device-orientation algorithms
- Improved ODR accuracy in Low Power mode over temperature
- Embedded 512-byte FIFO buffer continues to record data even when being read
- User-selectable Low Power or High-Performance modes
- Internal voltage regulator
- Digital I²C up to 3.4MHz and Digital SPI up to 10MHz
- Excellent temperature performance with high shock survivability
- RoHS / REACH compliant

ADS1219IPWR引脚功能介绍

Application Schematic



Pin Description

Pin	Name	Description
1	SDO/ADDR	Serial Data Out pin during 4-wire SPI communication and part of the device address during I2C communication. Do not leave floating.
2	SDI/SDA	SPI Data input / I2C Serial Data
3	IO_VDD	The power supply input for the digital communication bus. Optionally decouple this pin to ground with a 0.1uF ceramic capacitor.
4	TRIG	Trigger pin for FIFO buffer control. Connect to GND when not using external trigger option.
5	INT1	Physical Interrupt 1 (Push-Pull) The pin is in High-Z state during POR and is driven LOW following POR. Leave floating if not used.
6	INT2	Physical Interrupt 2 (Push-Pull) The pin is in High-Z state during POR and is driven LOW following POR. Leave floating if not used.
7	VDD	The power supply input. Decouple this pin to ground with a 0.1uF ceramic capacitor.
8	GND	Ground
9	GND	Ground
10	nCS	Chip Select (active LOW) for SPI communication. Connect to IO_VDD for I2C communication. Do not leave floating.
11	NC	Not Internally Connected. Can be connected to VDD, IO_VDD, GND or leave floating.
12	SCLK/SCL	SPI and I2C Serial Clock

Table 4: Pin Description

ADS1219IPWR方位图

Orientation



When device is accelerated in +X, +Y or +Z direction, the corresponding output will increase.

Static X/Y/Z Output Response versus Orientation to Earth's surface (1g):

GSEL1=0, GSEL0=0 (±2g)

	A	B	C
	序号	专业名称	级别
1	1	广告艺术设计师	高级
2	2	网络工程师	高级
3	3	电子商务师	高级
4	4	室内设计师	高级
5	5	平面设计师	高级
6	6	ERP财务应用师	高级
7	7	JAVA软件工程师	高级
8	8	计算机辅助设计师	高级
9	9	软件技术开发工程师	高级
10	10	软件开发工程师	高级
11	11	物联网技术应用工程师	高级
12	12	数据库管理工程师	高级
13	13	软件设计师	高级
14	14	网络安全架构师	高级
15	15	渗透测试工程师	高级
16	16	提示工程师	高级
17	17	大模型开发工程师	高级
18	18	数字技术应用工程师	高级
19	19	大数据治理工程师	高级
20	20	数据安全工程师	高级
21	21	程序设计工程师	高级
22	22	AIGC应用工程师	高级
23	23	大模型应用工程师	高级
24	24	大数据采集工程师	高级
25	25	商务数据分析师	高级
26	26	移动安全工程师	高级
27	27	安全运维工程师	高级
28	28	软件工程师	高级
29	29	数据库工程师	高级
30	30	音响工程	高级
31	31	舞台灯光	高级
32	32	通信工程师	高级
33	33	软件测试工程师	高级
34	34	新能源应用工程师	高级
35	35	新材料检测工程师	高级
36	36	新材料研发工程师	高级
37	37	新材料技术与应用工程师	高级
38	38	固体废物资源综合利用技术工程师	高级
39	39	现场管理工程师	高级
40	40	网络信息与安全工程师	高级
41	41	机器学习工程师	高级
42	42	python技术应用工程师	高级

企业认证证书 | 工信部职业 | 工信部人才交流中心测评证书 | 工

类别	编号	测评科目
计算机与软件	CPOO1	Office办公软件
	CPOO2	信息化办公
	CPOO3	计算机硬件维护
	CPOO4	系统管理
	CPOO8	设备管理
	CPOO9	网站管理
	CPO10	物流管理
	CPO11	网络营销
	CPO12	局域网组建
	CPO13	网络工程师
	CPO15	信息安全与管理
	CPO17	电子商务师
	CPO19	跨境电子商务师
	CPO20	数据管理
	CPO21	数据库应用技术
	CPO22	C语言编程高阶
	CPO24	.NET开发工程师
	CPO25	Android软件开发工程师
	CPO26	Java软件开发工程师
	CPO27	J2EE软件开发工程师
	CPO31	Web前端开发工程师
	CPO42	软件测试工程师
	CP206	财务信息化管理
	CPO45	平面设计师
	CPO47	网页设计师
	CPO48	二维动画设计师
	CPO49	三维设计师

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