IC

传感器/MEMS

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霍尔IC

Part No.	Supply Voltage (V)	Operate Point (mT) S-pole	Operate Point (mT) N-pole	Period (ms)	Supply Current (Avg.) (μA)	Output	Operating Temperature Range (°C)	Package (mm)
单极检测霍尔IC 检测S极或N极								
BU52012HFV	1.65 to 3.3	+3.0	–	50	3.5	CMOS	−40 to +85	HVSOF5
BU52013HFV	1.65 to 3.3	–	−3.0	50	3.5	CMOS	−40 to +85	HVSOF5
BU52069GWZ	1.65 to 3.6	–	−43.3	50	3.5	CMOS	−40 to +85	UCSP35L1 (0.8 × 0.8)H=max0.4
两极检测霍尔IC 检测出S极和N极时,输出ON(低电平有效)。								
New BU52092GWZ	1.65 to 3.6	+2.4	−2.4	50	4.4	CMOS	−40 to +85	UCSP35L1 (0.8 × 0.8)H=max0.4
BU52011HFV	1.65 to 3.3	+3.0	−3.0	50	5	CMOS	−40 to +85	HVSOF5
BU52061NVX	1.65 to 3.6	+3.3	−3.3	50	4	CMOS	−40 to +85	SSON004X1216
BU52055GWZ	1.65 to 3.6	+ 4.1	− 4.1	50	5	CMOS	−40 to +85	UCSP35L1 (0.8 × 0.8)H=max0.4
BU52054GWZ	1.65 to 3.6	+ 6.3	− 6.3	50	5	CMOS	−40 to +85	UCSP35L1 (0.8 × 0.8)H=max0.4
New BU52095GWZ	1.65 to 3.6	+9.5	−9.5	50	4.4	CMOS	−40 to +85	UCSP35L1 (0.8 × 0.8)H=max0.4
New BU52097GWZ	1.65 to 3.6	+15.0	−15.0	50	4.4	CMOS	−40 to +85	UCSP35L1 (0.8 × 0.8)H=max0.4
New BU52098GWZ	1.65 to 3.6	+24.0	−24.0	50	4.4	CMOS	−40 to +85	UCSP35L1 (0.8 × 0.8)H=max0.4
BD7411G	4.5 to 5.5	+3.4	−3.4	–	2.0(mA)	CMOS	−40 to +85	SSOP5
两极检测(极性判别输出) 霍尔IC 具有S极和N极检测用2个输出，能够辨别极性。								
New BU52272NUZ	1.65 to 3.6	+2.4	−2.4	50	4.4	CMOS (2 Outputs：S, N pole)	−40 to +85	VSON04Z1114A (1.1 × 1.4)H=max0.4
BU52014HFV	1.65 to 3.3	+3.0	−3.0	50	5	CMOS (2 Outputs：S, N pole)	−40 to +85	HVSOF5
BU52058GWZ	1.65 to 3.6	+3.0	−3.0	50	5	CMOS (2 Outputs：S, N pole)	−40 to +85	UCSP35L1 (0.8 × 0.8)H=max0.4
New BU52273NUZ	1.65 to 3.6	+4.1	−4.1	50	4.4	CMOS (2 Outputs：S, N pole)	−40 to +85	VSON04Z1114A (1.1 × 1.4)H=max0.4
New BU52274NUZ	1.65 to 3.6	+6.3	−6.3	50	4.4	CMOS (2 Outputs：S, N pole)	−40 to +85	VSON04Z1114A (1.1 × 1.4)H=max0.4
BU52075GWZ	1.65 to 3.6	+9.5	−9.5	50	5	CMOS (2 Outputs：S, N pole)	−40 to +85	UCSP35L1 (0.8 × 0.8)H=max0.4
BU52077GWZ	1.65 to 3.6	+15	−15	50	5	CMOS (2 Outputs：S, N pole)	−40 to +85	UCSP35L1 (0.8 × 0.8)H=max0.4
BU52177GXZ	1.65 to 3.6	+15	−15	50	5	CMOS (2 Outputs：S, N pole)	−40 to +85	XCSP30L1 (0.65 × 0.65)H=max0.33
BU52078GWZ	1.65 to 3.6	+24	−24	50	5	CMOS (2 Outputs：S, N pole)	−40 to +85	UCSP35L1 (0.8 × 0.8)H=max0.4
交变磁场检测霍尔IC 检测电极转换(N极→S极: 输出为高→低　S极→N极: 输出为低→高)								
BU52040HFV	1.65 to 3.3	+3.0	−3.0	0.5	200	CMOS	−40 to +85	HVSOF5

照度传感器

Part No.	Supply Voltage (V)	Sensitivity Variations (%)	Illuminance Measurement Range (lx)	High Sensitivity	IR Cut	I/F	Operating Temperature Range (°C)	Package
电流输出型模拟照度传感器IC								
BH1603FVC	2.4 to 5.5	± 15	0 to 100,000	–	–	Linear Current Output (Source)	−40 to +85	WSOF6
BH1620FVC	2.4 to 5.5	± 15	0 to 100,000	–	–	Linear Current Output (Source)	−40 to +85	WSOF5
BH1680FVC	2.4 to 5.5	± 15	0 to 50,000	✓	✓	Linear Current Output (Source)	−40 to +85	WSOF5
New BH1682FVC	2.3 to 5.5	± 3μA	0 to 55,000	–	✓	Logarithmic Current Output (Source)	−40 to +85	WSOF5
16bit串行输出型数字照度传感器IC								
BH1721FVC	2.4 to 3.6	± 15	0 to 65,000	–	–	I²C	−40 to +85	WSOF5
BH1730FVC	2.4 to 3.6	± 15	0 to 65,000 (1/128 lx step)	✓	–	I²C	−40 to +85	WSOF6
New BH1726NUC	2.3 to 3.6	± 15	0 to 30,000 (1/512 lx step)	✓	✓	I²C	−40 to +85	WSON008X2120

颜色传感器

Part No.	Supply Voltage (V)	λp (nm) Red	λp (nm) Green	λp (nm) Blue	λp (nm) Clear	Illuminance Measurement Range (lx)	High Sensitivity	IR Cut	I/F	Operating Temperature Range (°C)	Package
16bit串行输出型数字颜色传感器IC											
BH1745NUC	2.3 to 3.6	620	540	460	585	0 to 40,000	✓	✓	I²C	−40 to +85	WSON008X2120

脉搏传感器

Part No.	Analog Supply Voltage (V)	IO Supply Voltage (V)	Red Light Cut	IR Cut	I/F	Operating Temperature Range (°C)	Package (mm)
光学式脉搏传感器IC							
New BH1790GLC	2.5 to 3.6	1.7 to 3.6	✓	✓	I²C	−20 to +85	WLGA010V28 (2.8 × 2.8)H=max1.0

气压传感器IC

内置温度补偿功能数字气压传感器

Part No.	Supply Voltage (V)	Pressure Range (hPa)	Relative Pressure Accuracy (hPa)	Absolute Pressure Accuracy (hPa)	Average Current Consumption (μA)	I/F	Operating Temperature Range (°C)	Package (mm)
New BM1383AGLV	1.7 to 3.6	300 to 1100	±0.12	±1	3.0	I²C	−40 to +85	CLGA12V025M (2.5 × 2.5)H=max1.0

温度传感器

模拟输出温度传感器IC

Part No.	Supply Voltage (V)	Temperature Accuracy (°C)		Temperature Sensitivity(mV/ °C)	Output Voltage (V) (Ta=30°C, V_{DD}=3V)	Supply Current (μA)	Operating Temperature Range (°C)	Package
		Ta=30°C	Ta=−30, 100°C					
BD1020HFV	2.4 to 5.5	±1.5	±2.5	−8.2	1.3	4.0	−30 to +100	HVSOF5

数字输出温度传感器IC

Part No.	Supply Voltage (V)	Temperature Accuracy (°C) Ta=20 to +85°C	Supply Current (μA)	I/F	Operating Temperature Range (°C)	Package
New BH1900NUX	2.7 to 3.6	±3.0	75.0	I²C	−30 to +95	VSON008X2030

低消耗电流温控输出(温度开关) 温度传感器IC

Part No.	Supply Voltage (V)	Detect Temperature (°C)	Detect Temperature Accuracy (°C)	Supply Current (Operation/Power down) (μA)	Output Type		Operating Temperature Range (°C)	Package
					Type	Active		
BDJxxx1HFV series	2.4 to 5.5	60, 70, 75, 80, 85, 90	±2.5	7.5/0.3	Open Drain	H	−30 to +100	HVSOF5
BDJxxx0HFV series		55, 60, 65, 70, 80				L		

低消耗电流温控输出(温度开关)温度传感器IC：※ 品名BDJxxx1HFV内为检测温度(xxx：060, 070, 075, 080, 085, 090)。
BDJxxx0HFV品名内为检测温度(xxx：055, 060, 065, 070, 080)。

人体感应传感器用IC

热释电红外传感器用放大器

Part No.	Supply Voltage (V)	DRAIN Voltage (V)	AMP1/AMP2 Gain (dB)	Output Type	Package
BD9251FV	2.97 to 6.00	2.3	Max. 46	Analog / CMOS	SSOP-B14

电容式开关控制器

电容式开关控制器IC

Part No.	Supply Voltage (V)	Cap Switch	LED_Driver	LED_PWM control	Matrix Control	Interface	MCU	Program Memory	Intermittent Motion	Package
BU21170MUV	3.0 to 5.5	5ch	5ch	✓	—	I²C	32 bit	ROM	—	VQFN020V4040
BU21072MUV	3.0 to 5.5	10ch	6ch	✓	4 × 4	I²C	32 bit	ROM	—	VQFN024V4040
BU21078MUV	3.0 to 5.5	12ch	8ch	✓	6 × 6	I²C	32 bit	ROM	—	VQFN028V5050
New BU21078FV	3.0 to 5.5	12ch	8ch	✓	6 × 6	I²C	32 bit	ROM	—	SSOP-B28
BU21079F	3.0 to 5.5	8ch	—	—	4 × 4	I²C	32 bit	ROM	✓	SOP16
BU21077MUV	2.7 to 5.5	8ch	—	—	Adjustable	I²C	32 bit	RAM	✓	VQFN020V4040

触摸屏控制器

电阻式

Part No.	Supply voltage (V)	MCU	Resolution	Touch Detection	Stand-by Current (μA)	Active Current (mA)	Host I/F	Operating Temperature Range (°C)	Package (mm)	Automotive Grade	AEC-Q100
BU21021GUL	2.7 to 3.6	32bit	4096 × 4096	2 point/Single	60	4.0	I²C/SPI	−20 to +85	VCSP50L2 2.65 × 2.70, t=0.55	YES	—
New BU21028FV-M	2.7 to 3.6	—	4096 × 4096	2 point/Single	100	0.8	I²C	−40 to +85	SSOP-B20	YES	YES
BU21029GUL	1.65 to 3.6	—	4096 × 4096	2 point/Single	100	0.8	I²C	−20 to +85	VCSP50L2 2.0 × 2.0, t=0.55	YES	—
BU21029MUV	1.65 to 3.6	—	4096 × 4096	2 point/Single	100	0.8	I²C	−20 to +85	VQFN020V4040	YES	—
BU21024FV-M	2.7 to 3.6	8bit	1024 × 1024	2 point/Single	60	4.0	I²C/SPI	−40 to +85	SSOP-B28	YES	YES
BU21023GUL	2.7 to 3.6	8bit	1024 × 1024	2 point/Single	60	4.0	I²C/SPI	−20 to +85	VCSP50L2 2.6 × 2.6, t=0.55	YES	—
BU21023MUV	2.7 to 3.6	8bit	1024 × 1024	2 point/Single	60	4.0	I²C/SPI	−20 to +85	VQFN028V5050	YES	—
BU21025GUL	1.65 to 3.6	—	4096 × 4096	Single	0.8	0.12	I²C	−30 to +85	VCSP50L2 2.0 × 1.5, t=0.55	YES	—

支持SPI/I²C 触摸屏I/F LSI (LAPIS Semiconductor产品)

Part No.	Supply voltage (V)	MCU	Resolution	Touch Detection	Stand-by Current (μA)	Active Current (mA)	Host I/F	Operating Temperature Range (°C)	Package (mm)	Automotive Grade
ML26700CGD	2.7 to 3.6	—	4096 × 4096	Single	30	0.42	I²C	−40 to +85	WQFN12 3.0 × 3.0, t=0.55	YES
ML26700SGD	2.7 to 3.6	—	4096 × 4096	Single	30	0.56	SPI	−40 to +85	WQFN12 3.0 × 3.0, t=0.55	YES

加速度传感器

(Kionix产品)

3轴加速度传感器

Part No.	Axis	Full Scale G Range	Interface Output	Current Consumption (μA)	Size, Pins, and Package Type	Features
KX022-1020	3	User-selectable 2g, 4g, 8g	Digital SPI/I²C	10 to 130	2×2×0.9mm, 12pin, LGA	Small Footprint, Directional Tap/Double-Tap™ , Excellent Temperature Performance, Embedded FIFO/FILO buffer, Digital High-Pass Filter Outputs, User-configurable wake-up function
KX023-1025	3	User-selectable 2g, 4g, 8g	Digital SPI/I²C	10 to 130	3×3×0.9mm, 16pin, LGA	Directional Tap/Double-Tap™ , Device Orientation Detection, Excellent Temperature Performance, Low Current Consumption, Embedded FIFO/FILO buffer, Digital High-Pass Filter Outputs, User-configurable wake-up function
KX122-1037	3	User-selectable 2g, 4g, 8g	Digital SPI/I²C	10 to 145	2×2×0.9mm, 12pin, LGA	2KB FIFO/FILO, Wide range of ODRs from 0.781Hz to 25.6kHz, Directional Tap/Double-Tap™ , Free Fall, Orientation Detection
New KX124-1051	3	User-selectable 2g, 4g, 8g	Digital SPI/I²C	10 to 145	3 × 3 × 0.9mm, 16pin, LGA	2KB FIFO/FILO, Wide range of ODRs from 0.781Hz to 25.6kHz, Directional Tap/Double-TapTM, Free Fall, Orientation Detection
KXCNL-1010	3	User-selectable 2g, 4g, 6g, 8g	Digital I²C	8 to 250	3×3×0.9mm, 16pin, LGA	Dual User-programmable State Machines, Low Power, Low Noise, Unmatched User Flexibility and Programmability
New KXCJB-1041	3	User-selectable 2g, 4g, 8g	Digital I²C	10 to 135	3×3×0.45mm, 10pin, LGA	High Stability, Wakeup Interrupt, Excellent Temperature Performance, Low Current Consumption, Ultra thin type
New KX112-1042	3	User-selectable 2g, 4g, 8g	Digital SPI/I²C	10 to 135	2×2×0.6mm, 12pin, LGA	Small Footprint, Directional Tap/Double-Tap™ , Excellent Temperature Performance, Embedded FIFO/FILO buffer, FreeFall, Digital High-Pass Filter Outputs, User-configurable wake-up function, Ultra thin type
KXCJK-1013	3	User-selectable 2g, 4g, 8g	Digital I²C	10 to 135	3×3×0.9mm, 16pin, LGA	High Stability, Wakeup Interrupt, Excellent Temperature Performance, Low Current Consumption
KXTJ2-1009	3	User-selectable 2g, 4g, 8g	Digital I²C	10 to 135	2×2×0.9mm, 12pin, LGA	High Stability, Low Power, Low Noise, Wakeup Interrupt, Small Footprint
New KXTJ3-1057	3	User-selectable 2g, 4g, 8g, 16g	Digital I²C	10 to 135	2 × 2 × 0.9mm, 12pin, LGA	High Stability, Low Power, Low Noise, Wakeup Interrupt, Small Footprint
KXCJ9-1008	3	User-selectable 2g, 4g, 8g	Digital I²C	10 to 135	3×3×0.9mm, 10pin, LGA	High Stability, Low Power, Low Noise, Wakeup Interrupt, Excellent Temperature Performance
New KX224-1053	3	User-selectable 8g, 16g, 32g	Digital SPI/I²C	10 to 145	3 × 3 × 0.9mm, 16pin, LGA	2KB FIFO/FILO, Wide range of ODRs from 0.781Hz to 25.6kHz, Mechanical resonance frequency 6kHz(xy)、3.6kHz(z)
New KX224-1054	3	User-selectable 8g, 16g, 32g	Digital SPI/I²C	10 to 145	2 × 2 × 0.9mm, 12pin, LGA	2KB FIFO/FILO, Wide range of ODRs from 0.781Hz to 25.6kHz, Mechanical resonance frequency 6kHz(xy)、3.6kHz(z)
KXTC9 series	3	1.5g to 6.0g	Analog	170 to 310	3×3×0.9mm, 10pin, LGA	Low Power, Factory Programmable Internal Low Pass Filter
KXR94 series	3	1.0g to 4.0g	Multiplexed Analog	500 to 1400	5×5×1.2mm, 14pin, DFN	Excellent Temperature Performance, Low Noise Density
KXD94 series	3	5.0g to 15.0g	Multiplexed Analog	700 to 1500	5×5×1.2mm, 14pin, DFN	Internal 1kHz Filter or User-definable Bandwidth, Mid-range acceleration measurements

※Directional Tap/Double-Tap™是Kionix公司的商标。※ARM® and Cortex®是ARM公司的商标。

6轴组合传感器

(Kionix产品)

3轴加速度传感器+ 3轴陀螺仪传感器

Part No.	Axis	Gyroscope Full-Scale Range	Accelerometer Full-Scale Range	Accelerometer Sensitivity	Resolution	Size, No. of Pins, Package	Interface Output	Wakeup	Operating Temperature Range (℃)	Vcc[V]
New KXG03	6	+/-2048, +/-1024, +/-512, +/-256° /Sec	2g, 4g, 8g, 16g	16384(+/-2g),8192(+/-4g), 4096(+/-8g),2048(+/-16g), Counts/g	16	3 × 3 × 0.9mm, 16pin, LGA	Digital SPI/I²C	Yes	− 40 to + 85	1.8 to 3.3
☆KXG07	6	+/-2048, +/-1024, +/-512, +/-256, +/-64° /Sec	2g, 4g, 8g, 16g	16384(+/-2g),8192(+/-4g), 4096(+/-8g),2048(+/-16g), Counts/g	16	3.0 × 3 × 0.9mm, 16pin, LGA	Digital SPI/I²C	Yes	− 40 to + 85	1.8 to 3.3
☆KXG08	6	+/-2048, +/-1024, +/-512, +/-256, +/-64° /Sec	2g, 4g, 8g, 16g	16384(+/-2g),8192(+/-4g), 4096(+/-8g),2048(+/-16g), Counts/g	16	2.5 × 3 × 0.9mm, 14pin, LGA	Digital SPI/I²C	Yes	− 40 to + 85	1.8 to 3.3

3轴加速度传感器+ 3轴地磁传感器

Part No.	Axis	Accelerometer G-Range	Interface Output	Current (μA)	Magnetometer Range	Angular Velocity Range	Operating temperature Range (°C)	Size, Pins, and Package Type	Features
New KMX62-1031	6	User-selectable 2g, 4g, 8g, 16g	Digital I²C	10 to 395	± 1200 μT	N/A	− 40 to + 85	3×3×0.9mm, 16pin, LGA	E-compass Solution, Magnetic field change, Freefall Communications down to 1.2V

※FlexSet™ and Double-Tap™是Kionix公司的商标。

☆：开发中

红外线图像传感器

(LAPIS Semiconductor产品)

红外线(IR)传感器

Part No.	Feature	Pixel	Measurement Range (°C)	Temperature Resolution (without lens) (°C)	Output Type	Read Speed	Supply Voltage (V)	Operating Temperature Range (°C)	Package
ML8540	2K pixels thermopile type IR image sensor Package	47row × 48column 2256 pixels	− 30 to 300 (Variable)	0.5	Analog	6FPS	4.5 to 5.5	− 30 to + 85	C-QFN24