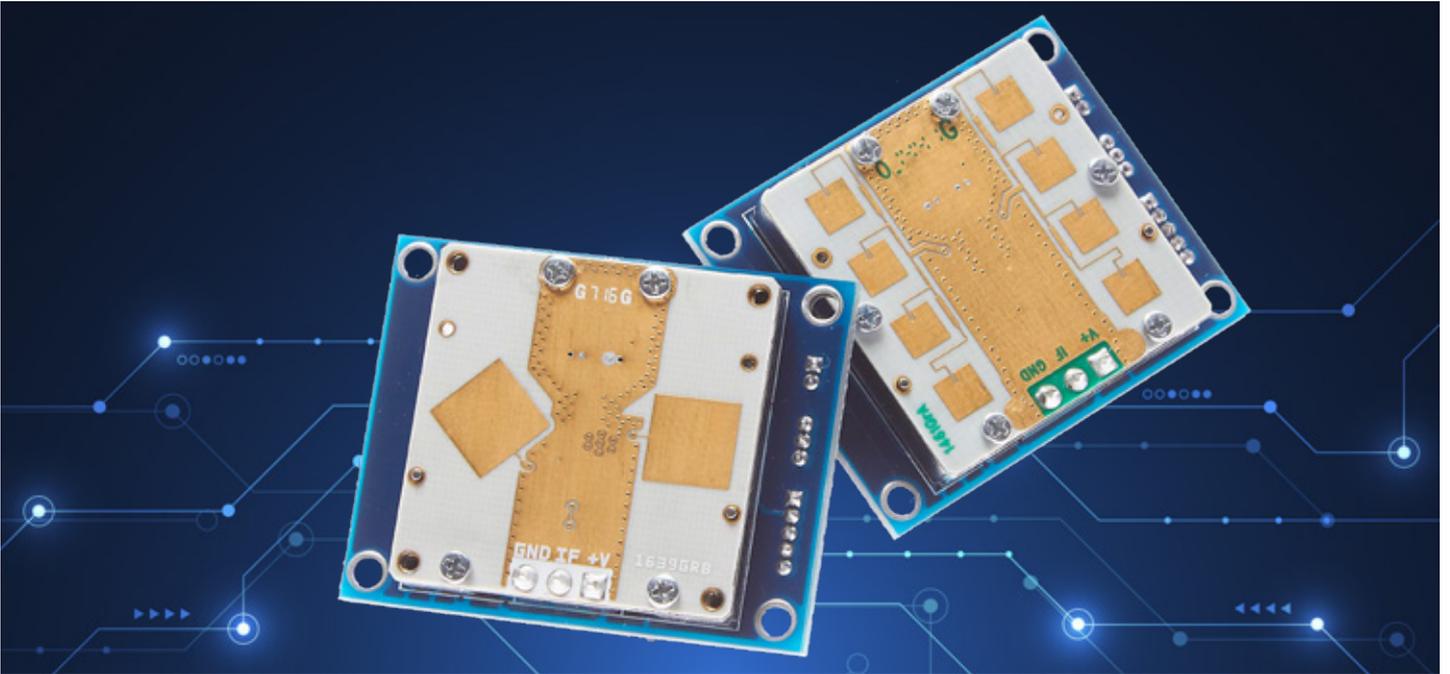


MP131 and MP132



K-band Motion Detector

MP131/132¹ is a low power miniature motion detector. It's small size and compact design are ideal for applications in small spaces.

The MP131/132 performs signal processing, conditioning and digitises AGIL microwave sensors' analog output signal.

Onboard IF-amplifier dual-gain selector is also available for users selection based on their application needs.

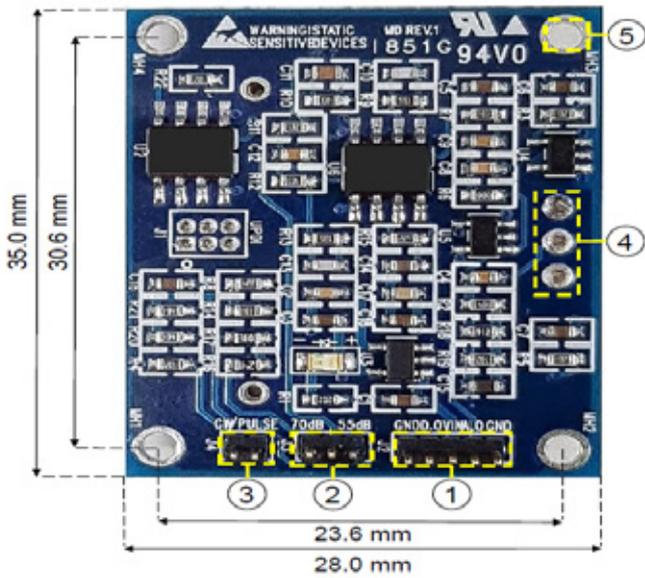
Key Applications

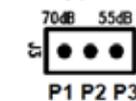
- Automatic door control
- Motion detection
- Lighting control
- Home automation
- Security Alarm

Key Features

- Small and flat profile
- Low current consumption
- Dual digital and analog signal outputs
- Selectable IF-amplifier gain
- Selectable CW and pulse mode operation

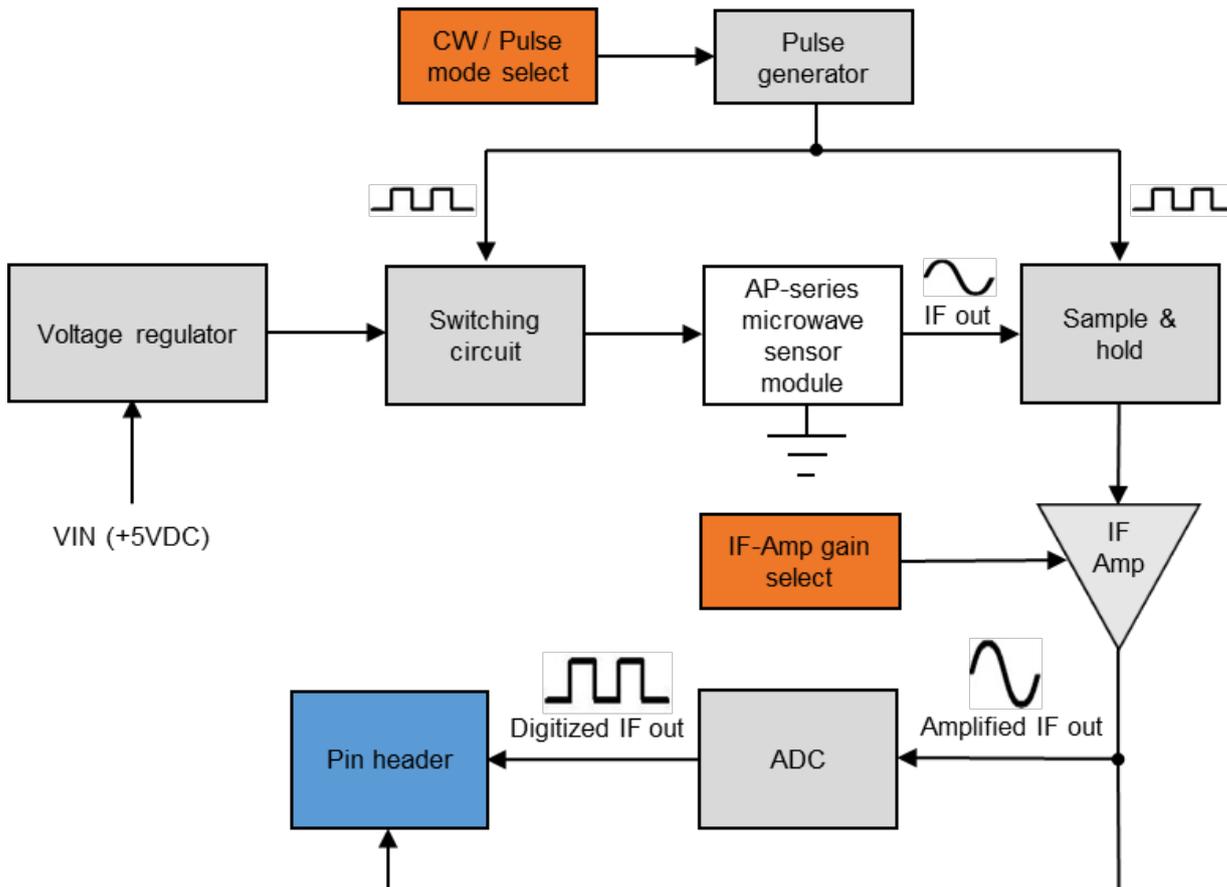
On-board Connector and Controls



Label	Description	Functions
1	Five-way pin header ¹ 	Power supply and outputs VIN - +5VDC power supply A.O - Analog IF Output D.O - Digital IF Output GND - Ground
2	Three-way pin header ¹ 	IF-amplifier gain selector SHORT PIN 1 & 2 - 70dB SHORT PIN 2 & 3 - 55dB
3	Two-way pin header ¹ 	Operating mode selector SHORT - Pulse OPEN - CW
4	2.54mm pitch sensor mounting holes	AP microwave sensor module interface
5	Ø2mm x 4 PCB mounting holes	Mounting holes to attach PCB to an enclosure or surface

¹1mm pitch interface connector to be used for the pin header.

Block Diagram



Technical Specifications

PARAMETER	REMARKS	MIN	TYP	MAX
OPERATING CONDITIONS				
Supply Voltage, VIN (V _{DC})		4.75	5	5.25
Current Consumption, Pulse/CW (mA)	Includes AP96/ AP98		6/40	
Operating Temperature (°C)		-15		55
PULSE MODE OPERATION				
Pulse Frequency (KHz)	Pulse mode		1	
Duty Cycle (%)	Pulse mode		4	
IF AMPLIFIER				
Gain (dB)	Selectable		55/70	
Bandwidth (Hz)			15-300	
Detectable Speed of Motion (km/hr)		0.3		7
PHYSICAL PROPERTIES				
Dimensions (mm)			35.0 × 28.0 × 11.3	
Weight (g)			6.3	
ANTENNA				
Field of View (°)	MP131		32 x 80	
	MP132		Omni-Directional	
Antenna Sidelobe Rejection (dBc)	MP131		15	

Unless noted otherwise, the specifications are measured at +25°C.

Note 1: MP131 and MP132 come with an AP96 and AP98 miniature K-band microwave sensor module respectively. Please refer to AP96 and AP98's datasheets for detection pattern.

Note 2: **CAUTION: ELECTROSTATIC SENSITIVE DEVICE.** Observe precautions for handling and storage.

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