

Product Information

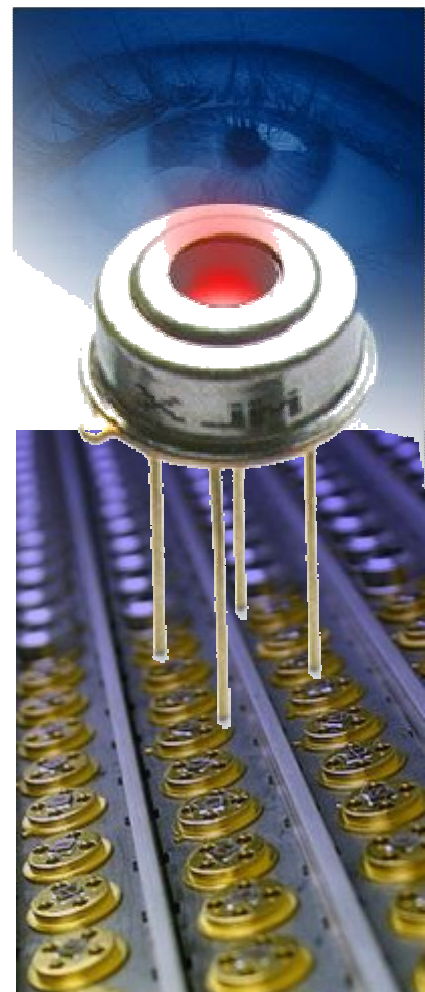
MLX90614

Digital, Plug and Play, Infrared Thermometer in a TO Can

The MLX90614 infrared thermometer is the solution for cheap and reliable contact-less temperature measurements. The integration of an infrared sensor and dedicated signal processing chip into one small TO-39 can results in a plug and play fully calibrated thermometer, ready to be integrated in your automotive, industrial, medical or consumer application.

Features and Benefits

- Factory calibrated IR thermometer with linear digital output;
- Small size TO-39 can, easy to integrate;
- Low cost, competitive prices;
- Standard calibration in wide temperature range:
 - 40 to 125°C for ambient temperature
 - 70 to 380°C for object temperature;
- Better than 0.5°C accuracy in the range 0-50°C;
- 0.01°C readout resolution possible.
- High refresh rate;
- Easy emissivity correction;
- Continuous temperature readout through PWM (Pulse Width Modulated) output;
- 2-wire SMBus compatible interface for reading temperatures and sensor reconfiguration;
- Building block for sensor network with up to 100 thermometers;
- High reliability and long-term stability;
- Excellent ESD/EMC characteristics
- Available for 3 and 5V applications, Easy to adapt for voltage sources in range 6-24V;
- Power saving mode for battery operation;
- Traceability through unique ID number in memory;
- Single or Dual zone thermometer version;
- RoHS compatible



Bus ICs

BLDC Motor
Control ICs

Pressure Sensors

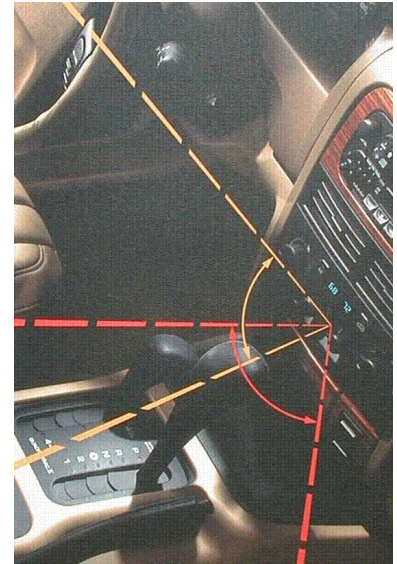
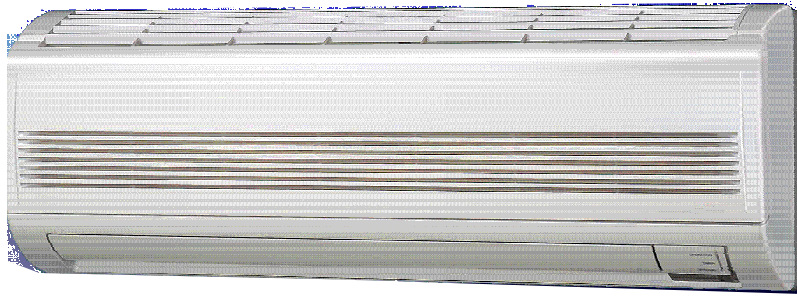
Wireless ICs

Hall Effect ICs
And Sensors

Optoelectronic
Sensors

Sensor Interface ICs

Infrared Sensors



Bus ICs

BLDC Motor
Control ICs

Pressure Sensors

Wireless ICs

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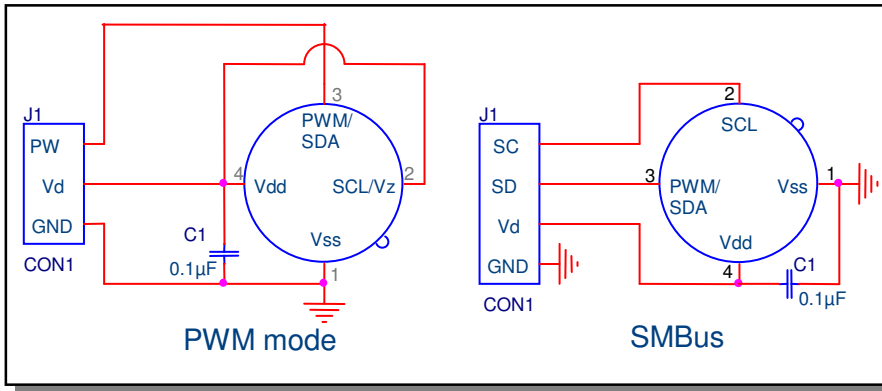
Optoelectronic
Sensors

Sensor Interface ICs

Infrared Sensors

Typical Applications

- High precision contact-less temperature measurement;
- Thermal Comfort sensor for Mobile Air Conditioning control system;
- Windshield defogging;
- Automotive blind angle detection;
- Temperature sensing element for residential, commercial and industrial building air conditioning;
- Presence detector;
- Fire/heat detection, alarm systems;
- Mobile telephones;
- Industrial temperature control;
- Temperature control in laser printers and copiers
- Home appliances: Microwave ovens, cooking stove, heater, hair dryer
- Healthcare;
- Livestock monitoring;
- Sensor grid for multi-zone temperature control;
- Thermal relay/alert;



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Sustainable Future

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