

80x80 pixels thermal sensor for large-volume applications

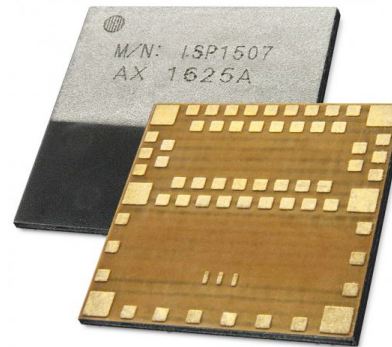
Delivered in a Ball Grid Array (BGA) wafer level package, the fully digital Micro80 Gen2 thermal sensor from ULIS is claimed to be the first infrared sensor box packaged in a JEDEC tray, making it suitable for large-volume applications. The device supports optical fields of up to 120° and is claimed to be the first infrared sensor with a unique plastic lens holder, eliminating the need for OEMs to develop their own. The Micro80 Gen2 consumes less than 55mW and operates in the -40 to +85°C temperature range. It supports a broad spectrum of frame rates (from 1Hz to 50 Hz) and allows vision up to 150 metres.



Complete article, here 

Complete Bluetooth LE module shrunk to 8x8x1mm

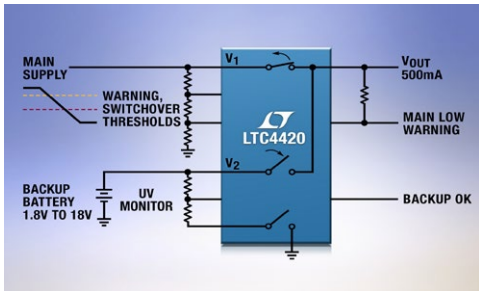
Insight SIP is releasing the ISP1507 to offer Bluetooth Low Energy Technology in a 8x8x1mm System-in-Package. The module integrates Nordic Semiconductor's nRF52832 chip (running Bluetooth 4.2), offering a 32-bit ARM Cortex M4 CPU, 512kB of flash memory, analogue and digital peripherals SPI, I2C and GPIO. This module forms a fully featured standalone Bluetooth Low Energy node. It draws 5.5mA typical for transmission and reception, 1.5µA in standby mode and 0.7µA in deep sleep mode. Transmission output power reaches +4 dBm and reception sensitivity is -96dBm.



Complete article, here 

Monolithic 18V prioritizer manages battery switchover

LTC4420 is a dual input monolithic power prioritizer for 1.8V to 18V systems, designed to enable portability, preserve memory during brownouts, and ensure a graceful shutdown on power loss, in electronic systems employing batteries and capacitors for backup power. The IC normally powers the load from the higher priority main supply such as a wall adapter or battery, switching to the backup supply—typically a battery or large-value capacitor—during primary brownout or power loss conditions. With up to 18V operating capability, the LTC4420 accommodates a wide range of power sources.



Complete article, here 

Ultra low, 1microAmp quiescent DC-DC step-down for wearables

Targeted at Li-Ion and coin cell powered devices such as blood glucose meters, remote controls, hearing aids and wireless mouse or other light-load applications, ams has posted details of the AS1313 hysteretic step-down DC-DC converter. The device has a load current capability of 150 mA with an ultra-low quiescent current of 1 µA. The AS1313 is optimized for light loads and with efficiencies of up to 95%. In order to save power it features a shutdown mode, where it draws less than 100 nA. In shutdown mode the battery is not connected to the output.



Complete article, here 