IR Image Sensor
2K pixel uncooled thermopile IR sensor design

ML8540

features

- 2k-pixel resolution thermopile image sensors
- Uncooled design results in a smaller form factor with less power consumption
- Co-developed with Nissan Motor Corp. utilizing CMOS and MEMS technologies

applications

- Energy-saving in BEMS/HEMS
- Security and health & fitness monitoring
- Gaming equipment, motion sensing
High Resolution Imaging

2K pixel sensor image samples

Easily obtain high sensitivity, high resolution thermal images

Balcony

Parking lot
Block Diagram

Compact, low-power design achieved by combining MEMS and CMOS technologies

Specifications
- Power supply voltage: 5V
- Operating temperature range: -30~+85°C
- Operating current (typ.): <5mA
- IR sensor:
  - 48x47 (2256) pixels
  - Measurement range: -30~300°C (variable)
  - Temperature resolution: 0.5°C @4fps, without lens