

# Electronics Analog Sensors

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# Transistors and diodes

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- diodes like zener diode; reverse current changes

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- diodes like zener diode; reverse current changes
- transistors: base comes from environment; pull-up on output (or pull-down)

# Single-chip devices

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- Hall effect

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- Temperature, etc.

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- Temperature, etc.
- linear, usually 5V in



# Available transducers

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UGN3503 Hall sensor

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SFH229 photodiode

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- UGN3503 Hall sensor
- SFH229 photodiode
- MRD-310 phototransistor

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UGN3503 Hall sensor

SFH229 photodiode

MRD-310 phototransistor

GP2Y0A21YK-1 infrared distance sensor

# Interfacing Analog Sensors

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resistive voltage divider or Wheatstone bridge

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diode/transistor voltage divider



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voltage output amplifier (possible)

