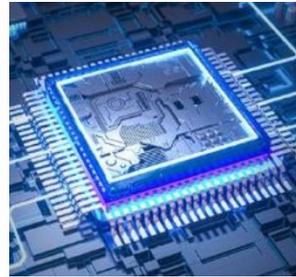




Silergy Corp.

- Founded in US, Feb. 2008
- Global Arrangement: 15 R&D centers and 21 sales offices in US, Asia, and Europe
- US headquarters Sunnyvale, CA; Asia headquarters Hangzhou, China
- Over 1600 patents in process, device, packaging, control, and IC Design
- Headcount: 1500+ (72% are R&D)
- IPO: 2013 Taiwan Stock Exchange, 6415.TW
- Innovation Driven Virtual IDM Platform Model
- 2022 Revenue: \$792M
- Consumer (35%), Industrial (34%), Computing (17%), Communications (9%), Automotive (5%)
- 18 different product lines
- Over 8000 Customers

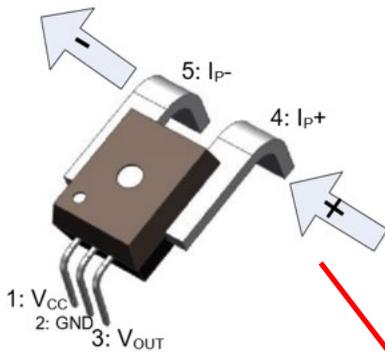




Energy Measurement Demo

SYCT050B — Linear Current Hall Effect Sensor SY7T609 — Energy Measurement Processor

Part Number	VCC (V)	I _p (A)	Sens (mV/A)	R (uOhm)	Response time (uS)	Bandwidth (kHz)	V _{ISO} (V _{RMS})	Features
SYCT050BR	3.3 or 5	±50	26.4 or 40	150	3	150	4800 (1min)	<ul style="list-style-type: none"> • Bidirectional • V_{CC}/2 Zero Point Voltage



Hall Effect High Precision Linear Current Isolated Sensor IC (SYCT050BR)

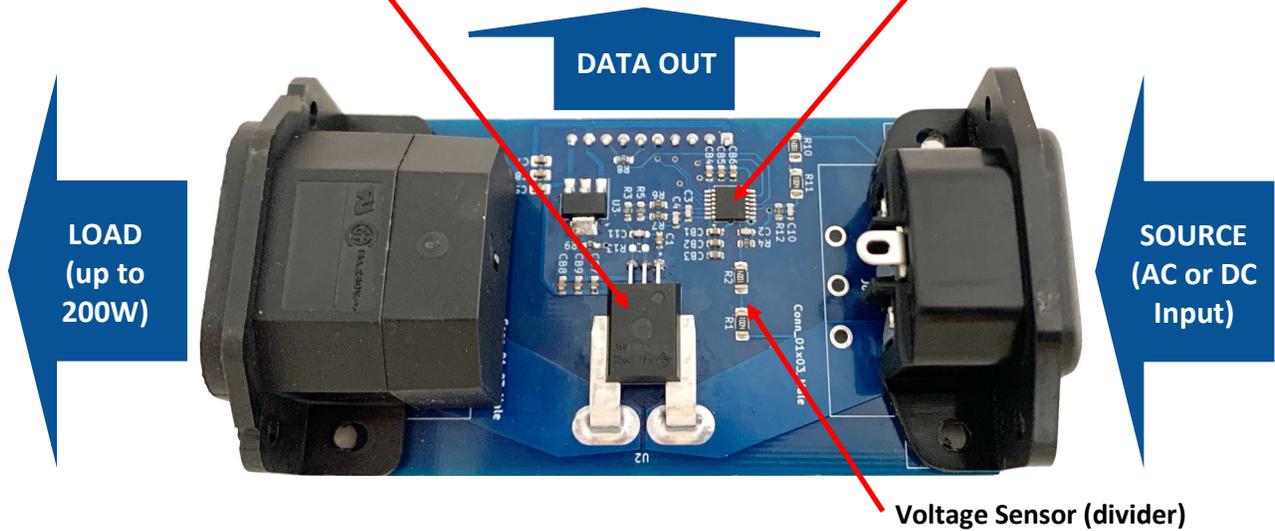
Both DC and AC supported

Non-linear error + temp drift: ±1% max

High Precision Single Chip Energy Measurement Processor (SY7T609)

Both DC and AC supported

Energy Accuracy: ±1% (tolerance of the on-chip oscillator)



Part Number	Voltage Sense	Current Sense	Temp. Sensor	UART	I ² C	SPI	Clock	DIOs	Package	Features
SY7T609	1	1	On-Chip	1	1	1	On-Chip	7	TSSOP14	<ul style="list-style-type: none"> • DC Support • Calibration Routines • Coefficient Storage

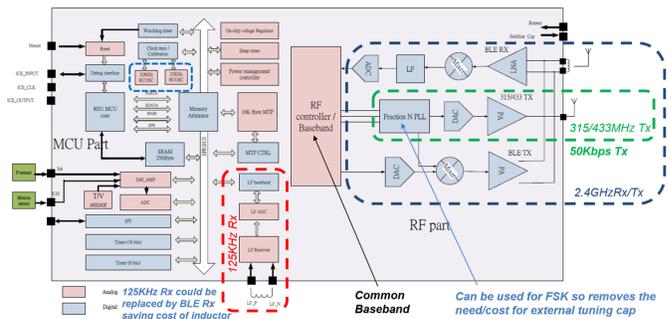


Silergy Sensors

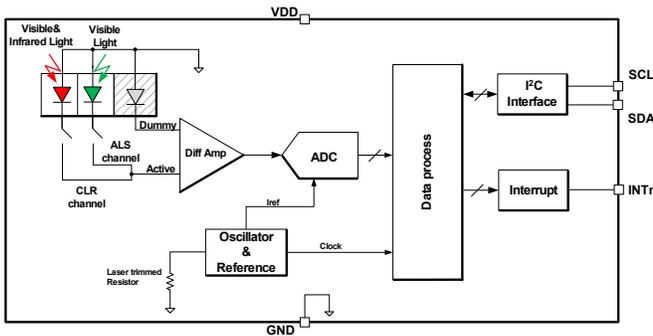
SA81201 — SoC for Tire Pressure Monitoring System Application
 SY22309AS22 — 21-bit True Ambient Light Sensor with Clear Channel
 SY24696 — Low-Power Digital Temperature Sensor

- Pressure Range: 0...100 Psi
- Dual BLE 4.1 (Tx/Rx), 433MHz (Tx) and 125kHz LF (Rx)
- 4 Integrated Sensors: Pressure, Temperature, Battery Voltage and 2-Axis Motion (Magnetic)
- 8051 Compatible MCU
- 16kB Flash (MTP) and 256-byte RAM (14kB for Customer)
- 4GPIOs (2 for UART)
- Advanced Power Control/Wake-Up System to Minimize Battery Consumption
- 2.1V...3.6V supply voltage range
- Sleep current <0.3uA @25°C
- AEC-Q100 Qualified
- QFN5.5mm×6.5mm×1.85mm (24 pins)

SA81201



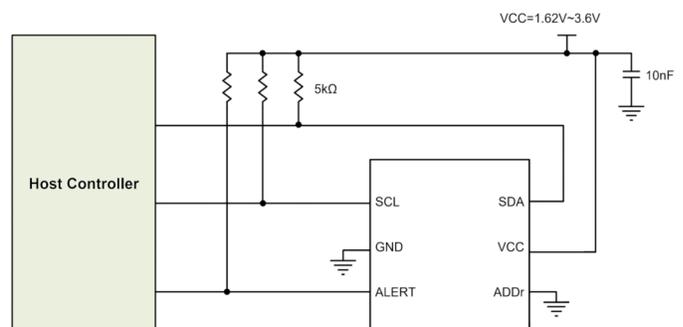
SY22309AS22



- 21-bit Dynamic Range ADC with 16512 Lux range and 0.0079Lux/count resolution
- Matching Human Eye Spectral Response ($\lambda_c = 550\text{nm}$)
- Excellent Output Linearity
- 2 Photo-diode channels allowing determination of light source (ratio of ALS/CLEAR)
- ALS: visible light with 6 sensitivity ranges
- CLEAR: visible and IR light with 2 ranges
- Configurable integration time to filter out 50/60Hz noise
- Configurable High/Low thresholds for Interrupt flag
- 2.0mm×1.5mm×0.6mm SMD Package BT with Transparent Molding Compound

- Accuracy without Calibration: 3°C (max) from -40°C to 125°C
- Digital Output: SMBus, and I2C Interface Compatibility
- Resolution: 12 Bits
- Low Quiescent Current: 7.5uA Active (max), 0.8uA Shutdown (max)
- Supply Range: 1.62V...3.6V
- SOT563 Package (1.6-mm×1.6-mm)

SY24696





Silergy Products Summary

For more info please visit www.silergy.com

Energy Measurement

AC & DC Power and Current Monitors
Energy Measurement AFE/SoC for Metering

Sensors

Optical – ALS and PXS
TPMS
Temperature
Hall Effect

Power Delivery

DCDC: Buck, Boost, Buck/Boost, LED Backlight
DCDC: Multi-phase High current (>100A)
Power Modules (embedded inductor)
PMIC
Motor Drivers
Type C / POE PD
ACDC



Protection

Hot-swap / E-fuse / Load SW
ESD / TVS



Energy Storage / Harvesting

Battery Management/Cell Balancing (BMS)
Fuel Gauges
Power Loss Protection (PLP)
Li-Ion Charging – 1...4 cell switching chargers
Wireless Charging – Qi Rx/Tx

Signal Chain

ADC/DAC
High Speed CLK Buffers, Synthesizers
Current Sense Amplifiers
Operational Amplifiers, Comparators
Class D Audio

Processing

Multi-Core Arm® Cortex® MCU for Industrial and Automotive
Embedded Neural Network Accelerators for Edge ML Applications

