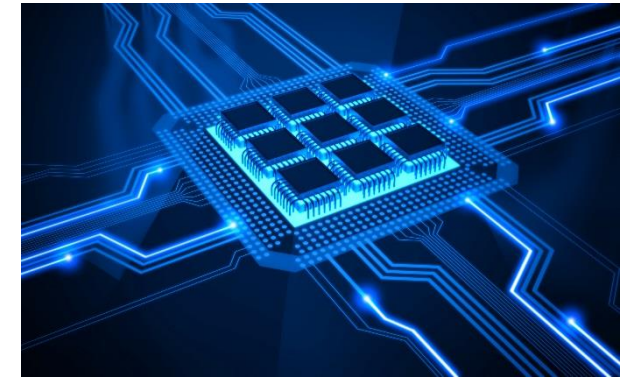




Innovation in Integration



Custom IC Design
ASIC Turnkey Solutions
IC Product Development

SystematicIC Design B.V.

Elektronicaweg 20

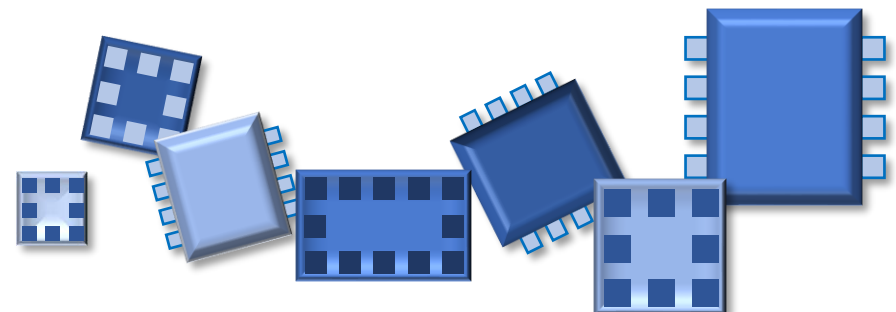
2628 XG Delft

The Netherlands

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E-mail: contact@systematic.nl

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DESIGN EXPERTISE



Sensor Interfacing

- Hall sensor IP: programmable linear, high speed current sensor
- Proximity and ambient light sensors, X-ray readout, Optical arrays
- Pressure sensor interfaces: Microphone amplifiers, Tire pressure sensor
- Temperature sensors



Power Conversion & Drivers

- Buck & boost converters
- Flyback & resonant converters
- Battery current and charge monitoring
- Class-D amplifiers, Power amplifiers
- Integrated charge pumps (doublers, inverters, bootstrap...)
- Switch drivers, Sensor-less motor drivers



High Voltage

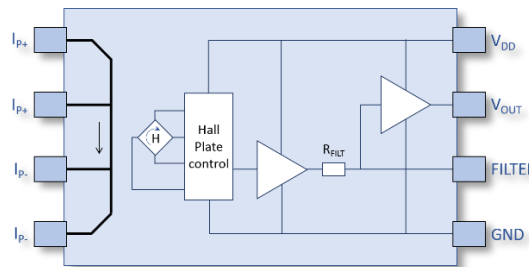
- Mains-connected (AC) LED driver ASIC – 400V operation (700V max.)
- Multi-chip high-voltage switch ASIC – (7.5kV max.)
- Inductive-boost-converter LED driver ASIC from battery supply from 3 - 6V input to 36V output

PRODUCTS - INDUSTRIAL

Hall Current Sensor IP

- Zero-loss DC current measurement
- Isolated measurement (several kV)
- Sensing current range: ± 10 A to ± 100 A
- Typical response time < 3.5 μ s
- Low offset, Low TC
- High gain accuracy: typical total output error of ± 1.5 %
- Supply voltage: 3 V, 5 V, 15V
- Operating Temp.: -40 to 110 $^{\circ}$ C
- Chip area: 2 to 5 mm²

Used in various types of power inverters, regulated power supplies, over-current protection modules, industrial robots, automation devices, etc.



PRODUCTS - CONSUMER

Proximity & Ambient Light IP

- Fully integrated photodiodes
- Infra-Red proximity sensor
- Proximity sensor range: 0 – 10 cm
- Ambient light sensor range: 1m Lux – 65k Lux
- Supply voltage: 1.7 to 3.6 V
- Operating temperature: -40 to 85 $^{\circ}$ C
- Chip area: 1 mm²

Used in mobile phone backlight intensity control & presence detection.

