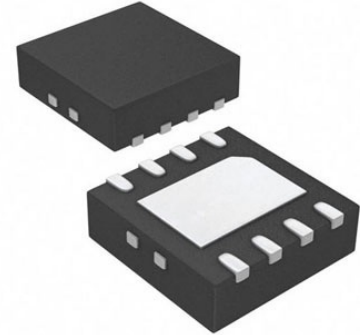


XENSIV(TM) - TLI4971-A120T5-E001 high precision coreless current sensor with analog interface and dual fast over-current detection outputs

Manufacturers	Infineon Technologies Corporation
Package/Case	PG-TISON-8
Product Type	
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for TLI4971A120T5E0001XUMA1 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The Infineon XENSIV™ TLI4971 is a new high precision miniature coreless magnetic current sensor for AC and DC measurements with analog interface and dual fast over-current detection outputs.

Infineon's well-established and robust Hall technology enables accurate and highly linear measurement of currents with a full measurement range up to $\pm 120A$. All negative effects (saturation, hysteresis) commonly known from sensors using flux concentration techniques are avoided. The current sensor is equipped with internal self-diagnostic feature.

The digitally assisted analog concept of TLI4971 offers superior stability over temperature and lifetime thanks to the proprietary digital stress and temperature compensation. The differential measurement principle allows great stray field suppression for operation in harsh environments.

We offer two derivatives:

TLI4971-A120T5-U-E0001 with 120A measurement range, UL certified device

TLI4971-A120T5-E0001 120A measurement range

Features

Integrated current rail with typical $225\mu\Omega$ insertion resistance enables ultra-low power loss

SMD package with very small form factor, 8x8mm for easy integration and board area saving

Single supply voltage, 3.1V to 3.5V

Highly accurate, scalable, DC & AC current sensing

Bandwidth greater than 120kHz enables wide range of applications

Very low sensitivity error over temperature (max. 2.5%)

Excellent stability of offset over temperature and lifetime

High robustness to voltage slew rates up to 10V/ns

Galvanic functional isolation up to 1150V peak VIORM. Partial discharge capability of at least 1200V. 4mm clearance and creepage.

Differential sensor principle ensures superior magnetic stray field suppression

Two independent fast Over-Current Detection (OCD) pins with configurable thresholds enable protection mechanisms for power circuitry (typical 0,7 μ s)

TS: -40...+105°C

Precalibrated sensor

Application

Electrical drives (up to 690V)

Photovoltaic Inverter

General purpose inverters

Overload and over-current detection

Current monitoring

Chargers

Power supplies

Related Products



[TLE4262](#)

Infineon Technologies Corporation
SOP14



[TLE7183QU](#)

Infineon Technologies Corporation
PG-TQFP-48



[TLE8242-2L](#)

Infineon Technologies Corporation
LQFP64



[TLE52052G](#)

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DC0831



[TLE4961-1M](#)

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SOT23-3



[TLE8209-1E](#)

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HSOP-20



[TLE8457CLE](#)

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[TLE72092R](#)

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HSOP20