03/20

Issue Preview

elektronik journal Power in April 2020

- Components
- Power supply units
- Energy management
- Measuring and testing

Hüthig Elektronik Medien Gruppe

Title sponsored by Advantech

Advertising deadline:
March 19, 2020

Publication date:
April 15, 2020

Hüthig
successful media for experts

Hüthig GmbH
Im Weiher 10
D-69121 Heidelberg

Tel.: +49 (0) 6221 489-232
Fax: +49 (0) 6221 489-482
www.all-electronics.de

EDITORIAL PREVIEW

Components

Parallel connection of DC/DC converters

Parallel connection of power supplies is a valid method of achieving benefits in the standardization of components used and realizing higher output currents. However, the requirement here is to understand the possible topologies for establishing a parallel connection and a stable control loop.

For a wide input voltage range

Many applications require a wide input voltage range, which results in very short or long operating cycles, in turn leading to poor performance and high losses. This article introduces a method for designing an efficient and very broad input power supply along with practical tips.

GaN for small satellites in LEO

The new space movement enables manufacturers to use technologies such as GaN for space applications, too. Until now, their use in power electronics has been slow to advance because there were no drivers available. With the availability of GaN FETs in enhancement mode, radiation-tolerant PWM controllers and GaN FET drivers, it is now possible to use GaN in power management applications.

Power supply units

Electrically conductive compounds for EMI shielding

There are numerous methods to improve the overall electrical conductivity of housings and the resulting EMC performance by means of electrically conductive seals and mechanical fasteners. This article explains which aspects to consider before selecting and using an electrically conductive adhesive, sealant or grease.

Double-layer capacitors in transition

Precise process control, enabling selective layering of carbon atoms, and chemically sophisticated electrolytes have meant a component that was originally quite simple in the initial phase has been able to mature from a niche item into a technologically sophisticated mass product. Technologically speaking, however, the double layer capacitor is gradually reaching its physical limits.

Energy management

Innovations in DC/DC converters

The market for power supplies is extremely dynamic: there are numerous innovations aimed at increasing availability while at the same time enhancing the economic efficiency of the entire system. The new generation of QUINT DC/DC converters offers functions for even higher system availability than previously seemed possible. IECEx approvals also enable use in explosion-hazard environments. Signaling thresholds and characteristic curves can now also be adapted via the NFC interface.

Wireless charging for industrial and automotive applications

There are a number of challenges facing developers of wireless charging products that require a high level of system knowledge and expertise. However, with optimized components and careful alignment of the charger and load, coils of the right size and the correct spacing between coils, a good coupling factor can be achieved and power can be transferred to a high level of efficiency.

Measuring and testing

Alpine harmonics measurement

Snow guns are extremely complex machines with sophisticated controls, and their pump and blower drives are controlled by converters. For this reason, they also require the relevant EMC filters. The article deals with the development of a suitable filter as well as the corresponding measurement results.

Correcting contacting of power semiconductors for testing

The article explains how current power semiconductors such as MOSFETs and IGBTs can be connected to a measurement device for testing. It discusses methods to connect devices in different package types as well as the necessary technology for on-wafer characterization.

EDITORIAL PREVIEW

Advertising formats

	Width x height	Basic price b/w	4c
1/1 page	178 mm x 257 mm	€ 3,570.00	€ 4,645.00
1/2 page	86 mm x 257 mm /178 mm x 126 mm	€ 1,970.00	€ 2,815.00
1/3 page	56 mm x 257 mm /178 mm x 83 mm	€ 1,220.00	€ 2,065.00
1/4 page	41 mm x 257 mm /178 mm x 62 mm	€ 900.00	€ 1,500.00

For further information, please request our complete media data. Or simply click

www.elektronikjournal.com

Contact Persons

Advertising manager:
Frank Henning
Tel. +49 6221 489-363
frank.henning@huethig.de

Publishers

Hüthig GmbH
Im Weiher 10
D-69121 Heidelberg
Tel. +49 6221 489-232
Fax +49 6221 489-482
www.all-electronics.de

Sales Force

Austria, Great Britain, Ireland, USA, Canada
Marion Taylor-Hauser
Max-Böhm-Ring 3
D-95488 Eckersdorf
Tel. +49 921 31663
Fax +49 921 32875
taylor.m@t-online.de

Switzerland, Liechtenstein
interpress gmbh
Katja Hammelbeck
Ermatinger Str. 14
CH-8268 Salenstein
Tel. +41 71 55202-12
Fax +41 71 55202-10
kh@interpress-media.ch

Order

❑ Please call me

Please send me the media data for
❑ AUTOMOBIL-ELEKTRONIK
❑ elektronik industrie
❑ elektronik journal
❑ productronic
❑ all-electronics.de

We are interested in an advertisement
❑ 1/1 page ❑ 1/2 page
❑ 1/3 page ❑ 1/4 page

Fax service +49 6221 489-482

Last name, first name

Company

Department

Street/post office box

Postal code/City or town

Phone

E-Mail