



Dialog Field Team Newsletter

This is our 1st monthly newsletter - we hope you find it useful. The goal is to provide a short and snappy monthly digest of many of the things that the field team will find of use in day to day business – digestible in 10 minutes. Please send your suggestions to John Evans john.evans@diasemi.com or feedback about what works /doesn't work or what you'd like to see in this newsletter... we'll fine tune over the next couple of months.

IN THIS ISSUE

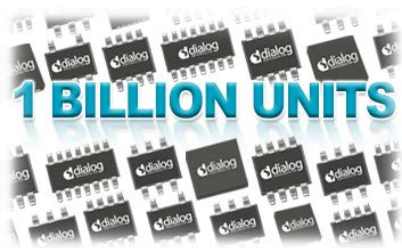
- Latest Product News
- Tools and Evaluation Boards
- Shows and Events

PAST ISSUES

This is a new publication

PRODUCT NEWS

Dialog Power Conversion Business Group Ships over 1 Billion Units in 2016



Dialog's Power Conversion Business Group reached a huge milestone in 2016, shipping over 1 billion ICs. This achievement made for a record-breaking year, fueled primarily by **RapidCharge™** controller solutions.

Ramping Up - DA9313 High-efficiency 98% Dual Cell Switched Capacitor Divider



Groundbreaking! that's the DA9313 high-voltage power management integrated circuit (PMIC) with a maximum output current of 10 A, suitable for applications supplied from a dual (2S) Li-ion or Li-polymer stacked cell battery pack, or any input voltage between 5 V and 10.5 V. The IC operates with efficiency during conversion of up to 98 %. Master/slave operation is offered, where a pair of devices can combine to double the peak output current to 20 A.

Low profile external components and a minimum PCB footprint allow small circuit implementation in compact applications. The pass devices are fully integrated therefore no external FETs are needed.

Collateral Package (Datasheet, Product Brief, EVK Guide, EVK Board) – available now!

Commercial SSL LED Lighting Solutions

Here's a low BOM cost, high performance solution for your customers with 0-10V dimmable commercial lighting applications:

[iW3631](#) LED driver:

- Up to 120W output
- Built-in 0-10V dimmer interface eliminates cost of driver circuit and MCU
- Supports PWM digital dimming for wireless lighting

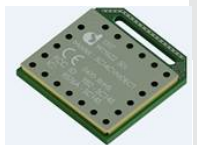
iW337 secondary-side signal interface controller:

- Pairs with iW3631 LED driver
- Integrated current source and optocoupler driver for low BOM cost

For high performance 120W non-dimmable commercial lighting, see the [iW3629](#).



The SC14CVMDECT Supports Voice & Data



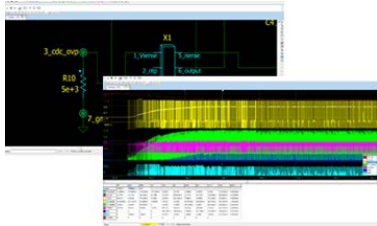
Now a complete wireless solution available on a Module: the **Cordless Voice Module -- SC14CVMDECT!**

- Operating in the interference free 1.9GHz (DECT) band, an official ETSI standard
 - Because of the long range (>300m line of site!), it is very popular as Intercom solution, as you save the expensive cabling
 - It not only supports HD Voice, but also small data even in parallel with the voice connection
 - It uses a flexible API Interface, so easily tuned for your application: easy to hook up to an external MCU.
 - The module is EU, FCC and for Japan certified, so you do not need to do any approval or have costly RF testers for your production
- Small form factor: 19.6 mm x 18 mm x 2.7 mm
- For more information about the module: <http://www.dialog-semiconductor.com/products/connectivity/voice-over-dect/cordless-voice-module-cvm>
- Contact Marius Bouman for more information Marius.Bouman@diasemi.com

Tools & Evaluation

AC/DC Simulation Tools Combine Analog and Digital Blocks for Higher Accuracy

You can download simulation tools for several of Dialog's AC/DC converters from the [Customer Support Site](#) (Power Conversion section). Developed using NL5 simulation software from Sidelinesoft, these models enable analog components and digital DLL files to be combined and simulated together for more accurate results. A handy "NL5 Quick Start Guide" is posted with all model files to get you off and running fast. The following models are currently available:



- [iW1602](#) – 30W AC/DC controller
- [iW1760B](#) – 45W AC/DC controller
- [iW673](#) – synchronous rectifier
- [iW1830](#) – 15W AC/DC controller with on-chip MOSFET

Evaluation Boards for White Goods, Home Appliance, Industrial Control Power Supply Customers



Dialog has evaluation boards for 10W and 15W single-output power supplies, as well as 15W dual-output supplies. These evaluation boards use standard, easy-to-procure components, including transformers from Würth Electronics Midcom, and enable customers to evaluate Dialog's [iW1818](#) and [iW1830](#) AC/DC converters, with their high efficiency, low no-load power consumption, excellent EMI performance. Download evaluation board documentation on the [Customer Support Site](#) (Power Conversion section). The evaluation board part numbers are listed below and can be purchased from Digikey or Mouser or Avnet.

- [iW1818-EVAL](#): 10W single output: 5V, 2A
- [iW1830-EVAL](#): 15W dual output: 12V, 1A or 5V, 0.5A
- [iW1830-EVAL1](#): 15W single output: 5V, 3A

These solutions are ideal in the home appliance, networking or general purpose AC-DC are: available online from Digikey/Mouser & Avnet. There are also nl5 models to support the designs!

Atmel/Microchip SAMA5 Cortex A-5 & DA9062 Power Supply

Do you have any customers using an Atmel SAMA5 cortex A-5 MPU? if you do, we have a new demo board which shows the DA9062 working: its higher performing vs the Active Semi ACT8865 which is typically found on the Atmel Reference design - great for your Avnet customers who don't have Active Semi on their line card. Speak to Robert Rozzario for a board and further details... it's a great way to enable a customer to cut & paste the power and move ahead with DA9062!



The DA9062 is the newest PMIC: 4 dc-dc, 4 LDO, GPIO etc, 5*5 QFN, all the great Dialog PMIC IP packed into a small footprint for simpler/general purpose applications.

DA14681 Wearable Development Kit: Jump Start your wearable design!

DA14681 is a highly-integrated Bluetooth Low Energy solution (4.2) optimized for wearable applications.



To speed up time-to-market for customers, Dialog has developed the A14681 wearable development kit. It a development kit on your wrist, with health and fitness SW support for prototyping and product development. The complete development suite consists of a watch with debugging interfaces, wearable software development kit, and android/iOS mobile apps. We are excited to launch the wearable dev kit to the market. For engagement process, please contact our regional marketing manager from Low Power Connectivity Business Unit.

BLE Range Extender

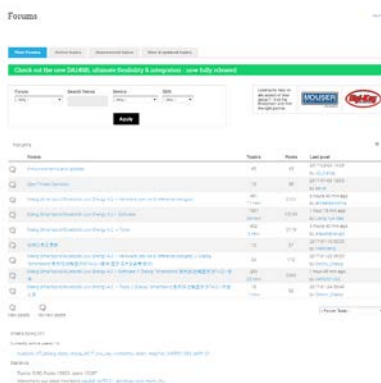
	DA1458x Range Extender DA14580 + SKY66111	DA1468x Range Extender DA14681 + SKY66112
Maximized range	> +9.3 dBm Nominal Maximum Output Power > -90 dBm receive sensitivity > 99.3 dBm link budget	> +13.5 dBm Nominal Maximum Output Power > -96 dBm receive sensitivity > 108.2 link budget

By combining Dialog's best-in-class Bluetooth low energy chip with Skyworks high-efficiency RF power amplifier front-end-modules (FEM), Dialog's range extender reference designs offer you optimal range without compromising on power consumption.

SmartBond Range Extender reference designs are available for both DA1458x and DA1468x products. Demo boards available on request – full documentation online...

<https://support.dialog-semiconductor.com/connectivity/reference-designs>

Community Support for BLE



The online forum support for BLE continues to gain momentum. If you need support for small-medium customers, direct them to the forum: we'll support them there! we answer all questions, hardware or software, customers can verify their answers, with the added benefit that it's a searchable knowledgebase for customers big & small. We make a 1st response to nearly all questions within 24 hours..

- Fully supported by Dialog support team.
- Hardware & software support.
- All devices: DA1458x, DA1468x
 - Over 3200 questions answered (15000+ posts)
- Public! anyone can view (need to log-in to post/reply etc.)

In the News/Events/Exhibitions



Dialog Demo of the Newest SSL LED Driver Solutions at Strategies in Light 2017, Anaheim, CA

[Strategies in Light Show](#)

- Date: February 28 – March 2, 2017

- Location: Anaheim Convention Center, Anaheim, CA

- Booth: #518

Dialog demos included the [iW3631](#) LED driver and [iW337](#) signal interface controller in 0-10V commercial lighting applications, along with the [iW3689](#) and [iW3658](#) LED drivers in dimmable A19, GU10 and downlight residential demos.

Embedded World –

Dialog will participate at [Embedded World](#) in Nuremberg March 14-17th. We'll be making the official launch of the DA9313 and additionally showcasing a number of IoT demos. Let us know if you have customers attending and we can arrange meetings!

Bluetooth World Santa Clara. -

Dialog will be a major sponsor at [Bluetooth World](#) 28-29th March in Santa Clara CA with a booth, keynote, demos, workshop and meeting space! Let us know if you need to host a customer meeting during the show: representatives from the business unit will be there to host your key customers...



Dialog Semiconductor Powers Next-Generation Connected Cars



Dialog announced the [DA9210-A](#) power management IC (PMIC). The DA9210-A is a multiphase, automotive grade, 12A DC-DC buck converter that supplies the high current core rails of microprocessor devices, including those used in next generation infotainment systems taking center stage in today's connected cars.

DA9210-A is designed to meet the stringent functional, quality and reliability demands of automakers and their customers. It is optimized for the supply of CPUs and GPUs, and can support load currents of up to 12A in single-chip configuration and 24A in dual parallel configuration. The PMIC's high efficiency over a wide output range makes it suitable for powering some of the newest and most demanding innovations of today's connected cars, from infotainment and navigation systems to full-scale integrated cockpits and future heads-up displays (HUDs). Collateral Package (Datasheet, Product Brief, EVK Guide, EVK Board).



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