



SPIDER

POWER MANAGEMENT IP PLATFORM

What is SPIDER ?

SPIDER is a turnkey solution to design and integrate energy-efficient power networks on SoCs.

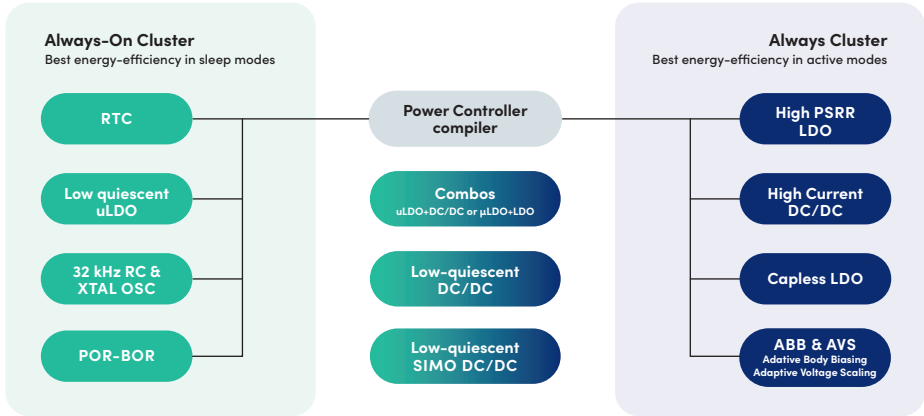
It includes a comprehensive set of voltage regulators, monitors, oscillators, power gating IPs, and a configurable digital power controller. SPIDER enables advanced low-power techniques such as adaptive body bias and voltage scaling.

SPIDER is built on Dolphin Semiconductor's state-of-the-art IP portfolio and system-level utility. It helps designers to speed up their design flow, optimize their BoM cost, and secure their silicon.

APPLICATIONS

- > **High performance computing**
- > **Medical devices**
- > **Automotive electronics**
- > **IoT devices**
- > **Smartphone & Tablets**
- > **Consumer electronics**

ONE-STOP SHOP PLATFORM



Flexible

Up to 5.5 v input voltage
with standard IO MOS

Down to 0.5 V programmable -
no trimming required

100 mA to 1.5 A loads

Efficient

70% efficiency @ 10 μ A DC/DC

90% peak efficiency DC/DC

3 or 4 outputs SIMO

5x performances improvement
via ABB corner tightening

Low power

350 nA Iq DC/DC

640 nA Iq SIMO

55 nA 32 kHz oscillator

160 nA μ LDO

300 gates power controller for deep
sleep mode

Reliable

20 yrs lifetime guarantee
(high reliability conf.)

Built-in safety features

User-configurable & GUI-based
power controller

< 10 mVpp ripple DC/DC



DOLPHIN
SEMICONDUCTOR

www.dolphin-semiconductor.com