

# Connecting Intelligence - Smart Grid



VP Embedded Processors

5<sup>th</sup> June 2013





## **SmartGrid - Scale of the Challenge**



Connectivity extremes

- •Drivers:
  - Maintaining lifestyles
  - •Renewable mix





## **Customers – everyone is different**

Fearful and Technophobic



Tech Savvy Über-Geeks







## **Enabling Smarter Energy Use**

Worldwide electricity consumption



Motors 46%

Electronics 10%

Electrolysis 3%

Heat 19%

Lighting 19%



Standby 3%





\* Figures collated from variety of sources



#### What is the SmartGrid?

- Saving energy, adding convenience, making things safe and secure
- Many challenges
- Large number of players
- Needs considerable collaboration
- And Partnerships
- Built on standards















## **Avoiding the Internet of Silos**



Move from closed verticals into true PnP platforms based on standards





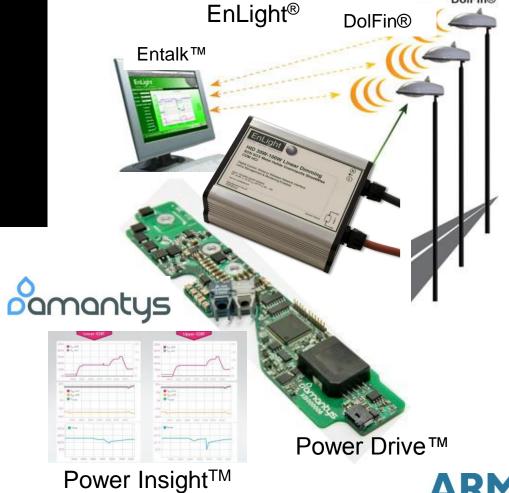
## **Example Technologies**

**DolFin®** 





Rik's Hub



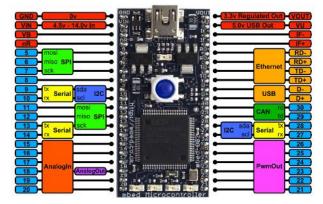


## **Go Prototype!**

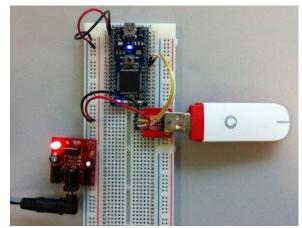
- Enable fast innovation
- Create proof of concept for investment
- Small affordable and simple to use



BeagleBone Black



mbed NXP LPC1768



mbed + VodafoneUSBModem



# **We Are Connecting Intelligence**

- Platforms
- Collaboration
- Innovation
- Partnerships



