



In-Home M2M for the Internet of Everything

Connected Living needs... Connectivity

CIR Strategy: Smart Systems Summit 2014

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Internet of Things: Connected Devices

- ▶ Internet of Things is more than consumer electronics
- ▶ Internet of Everything has to connect to every Thing
- ▶ Connecting up simple devices is not as simple as it looks
 - ▶ Connected Living needs:
 - Low cost
 - Low power
 - Ubiquity
 - Turn-key setup
 - ...
 - ▶ Appliances are positioned for usability, not for connectivity



E-Health



Energy-Smart Homes



Micro-generation monitoring



Home Automation



Intelligent Lighting



Assisted living



Smart appliances

*“Wi-Fi Wi-Fi everywhere,
But no guarantee of a link ...”*

-  E-Health ... in the bathroom ?
-  Energy-Smart Homes ... inside the garage ?
-  Micro-generation monitoring ... to the roof ?
-  Home Automation ... to the security system ?
-  Intelligent Lighting ... to the outside lights ?
-  Assisted living ... in every bedroom ?
-  Smart appliances ... in the utility room ?

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E-Health



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Micro-generation monitoring



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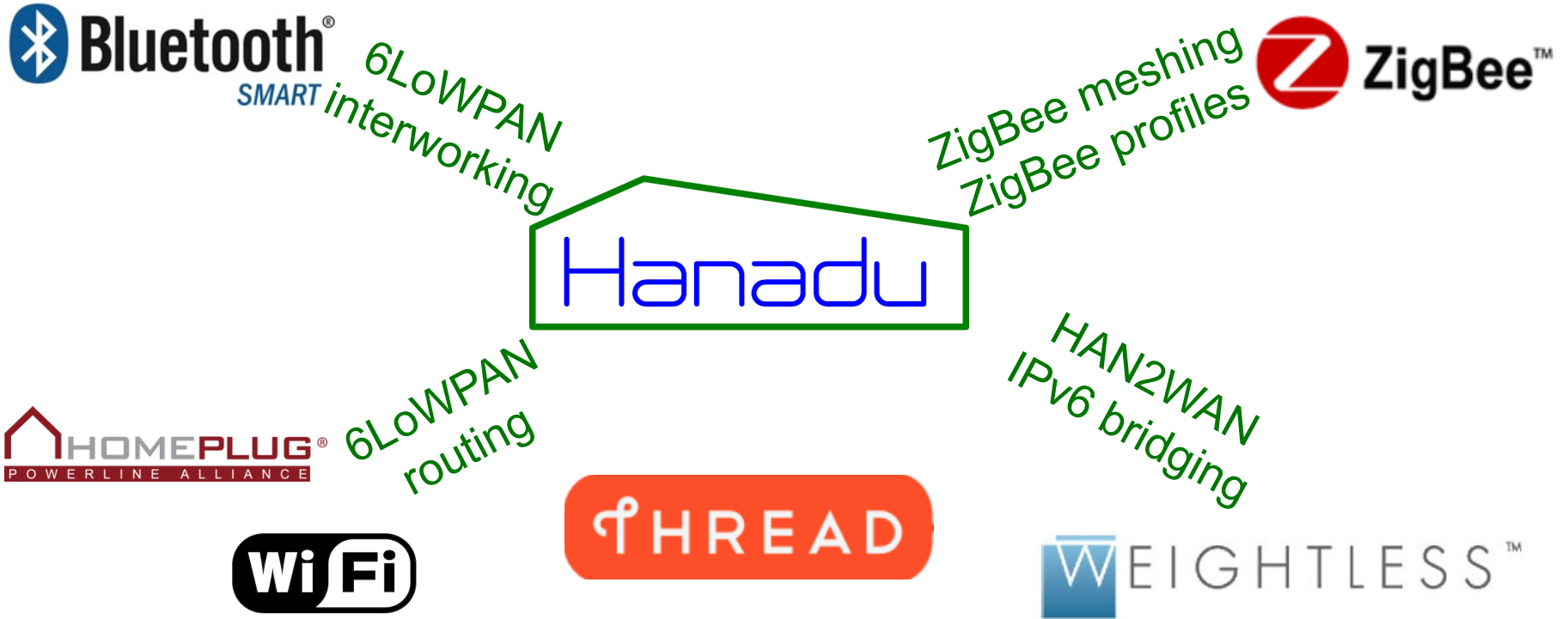
Smart appliances



A Single Common Network



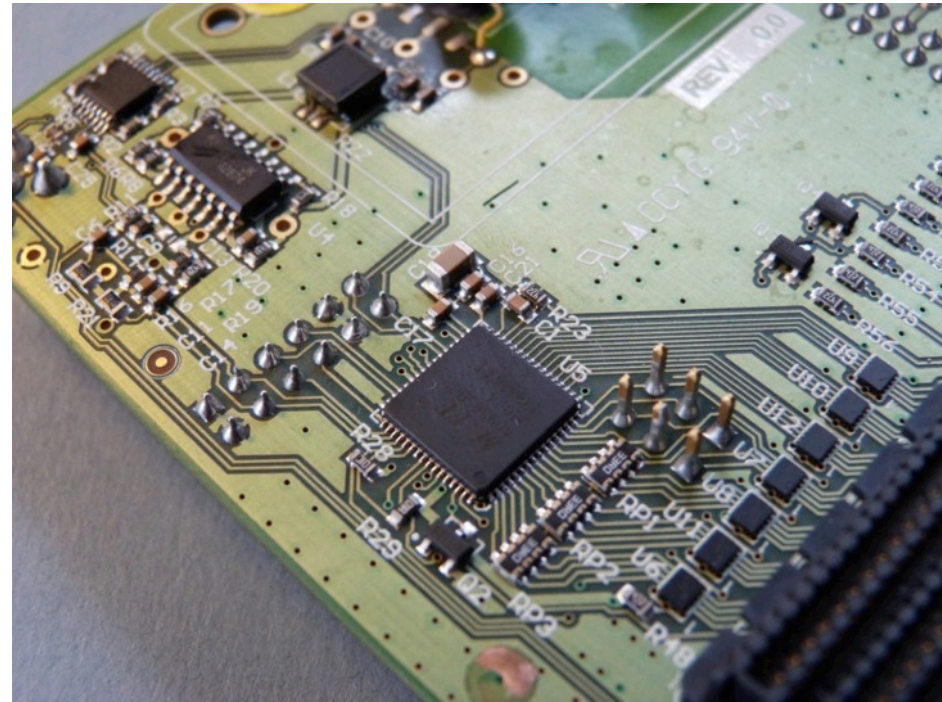
- ▶ Hanadu developed by Xsilon to plug the gap in the home
- ▶ Use existing network components, running over powerline
- ▶ Powerline now key, rather than irrelevant, to Connected Living



Hanadu Capabilities

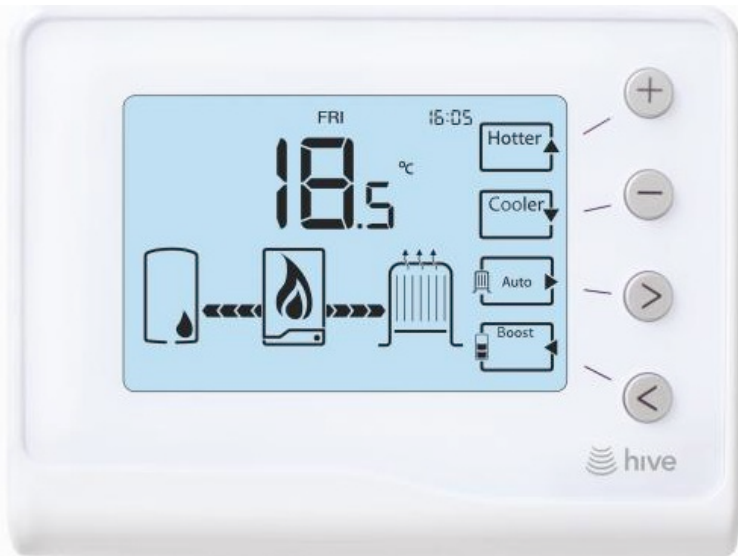


- ▶ Greenfield approach – No legacy obligations – Designed for In-Home M2M
- ▶ Open Specification (like ZigBee, Bluetooth, Thread, etc.)
- ▶ Full co-existence and integration with other home networking technologies
- ▶ Powerline addition to widely-used IEEE standard
- ▶ “Attic-to-Garage” connectivity
- ▶ Same price-point as Radio
- ▶ Tiny form factor
 - ▶ *Fits inside a mains plug*
- ▶ Hanadu SIG → Standardisation



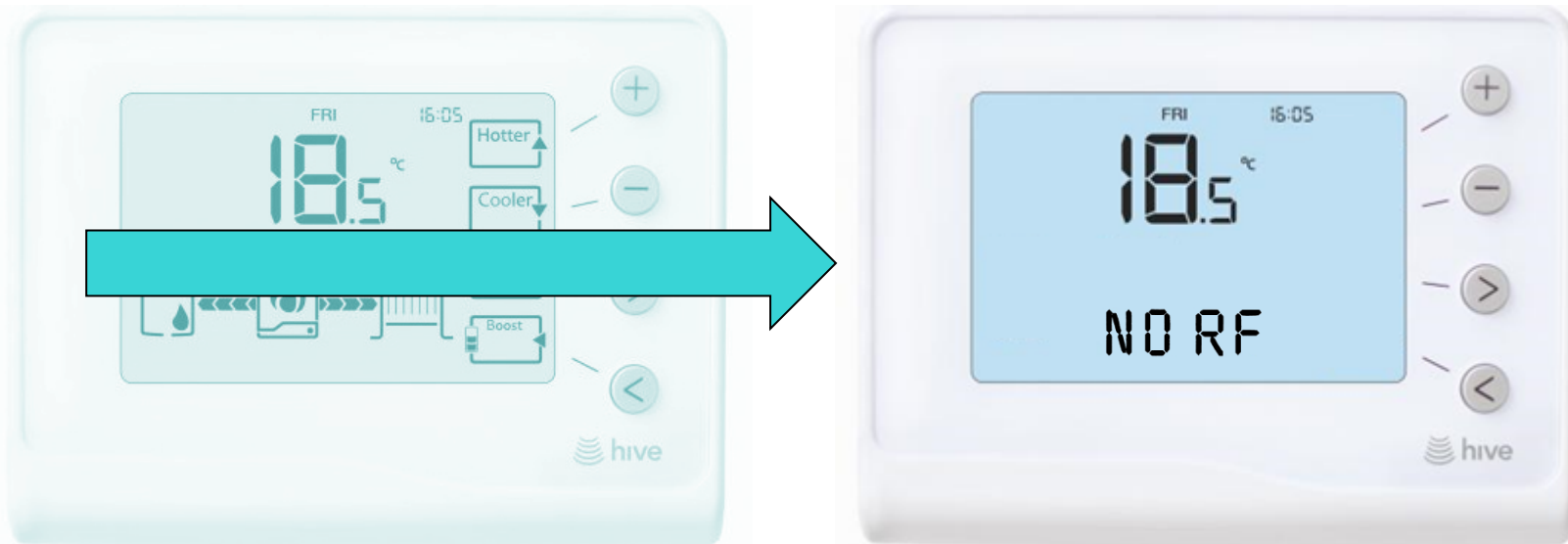
Home Energy Management

- ▶ Hive Active Heating: Uses ZigBee radios
 - ▶ ZigBee-connected “smart” thermostat
 - ▶ “Dumb” boiler control (ZigBee)
 - ▶ Web interface (ZigBee-to-Broadband)



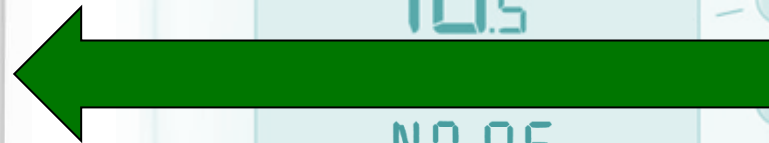
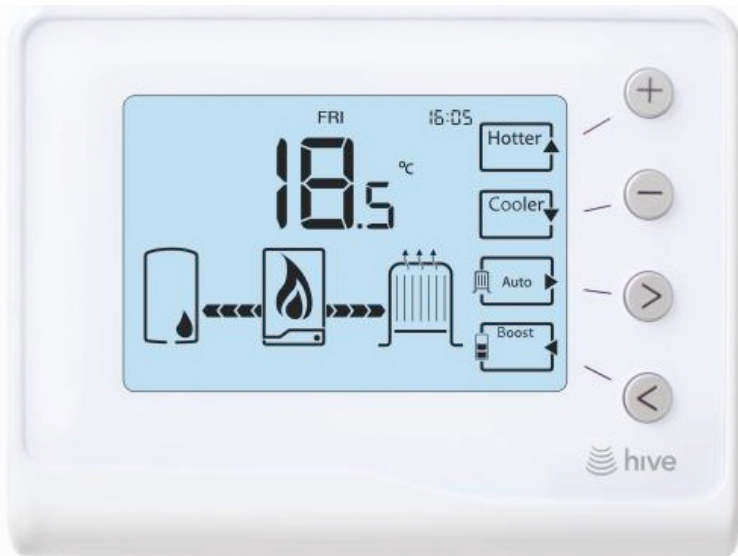
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- ▶ Radio/Powerline hybrid solution
- ▶ Hanadu connection to Boiler Control
- ▶ Hanadu/ZigBee bridge at Router

Xsilon

Creators of  Hanadu

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