Technical Article

Make Your Connected World Smarter with the SimpleLink Wi-Fi CC3200 Smart Plug

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Looking to start developing in the home automation market? Our new SimpleLink™ Wi-Fi® CC3200 Smart Plug TI Design reference design provides the schematics, BOMs, design files and test reports you'll need to jump start your designs for this rapidly expanding market segment.

The SimpleLink Wi-Fi CC3200 Smart Plug monitors real-time energy consumption and records long-term energy trends, making way for financial returns through energy savings. It enables the Internet of Things (IoT) by bringing the ability to control and monitor electronics and multiple outlets remotely. Below are a few example applications that may spur inspiration to start designing your own smart plug with the help of our TI Design reference design.

Home Energy Monitoring

Do you travel a lot for business or pleasure? Keep an eye on your home energy consumption, even thousands of miles away with the CC3200 Smart Plug. Integrate the smart plug metrology and Wi-Fi solution within major appliances and lightning controls/switches in your home, for greater peace of mind while you're away.

Smart Lighting Solution

Have a child that's afraid of the dark? Use the smart plug to control lighting in a particular room in your house. Plug a lamp in their room into the SimpleLink Wi-Fi CC3200 Smart Plug to be able to turn the lamp off via the smartphone app once they've fallen asleep without disturbing them by entering their room.

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Appliance Energy Monitoring Solution

Thinking of upgrading a major appliance in your home to a more energy-conscious model? Plug in any major appliance, such as a refrigerator, to the smart plug to determine exactly how much energy it is consuming, at any given time of the day, from anywhere. This energy consumption data can help you save money and determine when it may be time to replace it with a more efficient model.

Portable Space Heater

Winters can be brutal in many areas of the country. Wouldn't it be nice to have a specific room at just the right temperature before you return home from the office? No need to have the thermostat for the whole house set to a high temperature, just remotely turn on your space heater, for a warm return home, even on the coldest winter days.

Endless Development Applications Focused around Energy Awareness and Remote Control

Apply the Smart Plug's design concept, by integrating parts of this design into any end appliance, based on your [or your customers'] needs. The main building blocks are:

1. Ability to turn a load on/off
2. Ability to monitor the metrology data consumed by a load
3. Cloud integrated agent for remote monitoring and control
4. Local connection via an Android™ smartphone

Now that we've provided a few application ideas, let us know how you would use a smart plug in your home. For more information, check out our TI Design reference design for the SimpleLink Wi-Fi CC3200 Smart Plug.

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