Technical Article

Cooktops with Capacitive Touch Technology Make Quick Work in the Kitchen for the Holidays

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The holidays – that wonderful and hectic season at home with friends and loved ones – are upon us. Although we all may celebrate the season a little differently, we are all looking forward to enjoying great food during these cozy winter months.

The last thing we need to deal with is an oven or cooktop that gives us more work to do. Rather than dealing with imprecise, bulky and difficult-to-clean buttons and knobs, cooking systems using capacitive touch technology give chefs a precise and sleek interface that cleans up easily.

Figure 1. Cooktop Controls Using Capacitive Touch

Capacitive touch-enabled buttons, sliders, and wheels can handle electromagnetic disturbances created by motors and switches present in ovens, cooking ranges, dishwashers, blenders and slow cookers. Capacitive sensing can even discern between human touch and spilled mashed potatoes or gravy, eliminating false triggers entirely. Cleaning up the kitchen is also easier and safe since capacitive touch buttons have a protective overlay made of moisture-, chemical- and grease-resistant plastic, glass or stainless steel to handle the toughest messes.

TI MSP430™ microcontrollers with CapTIvate™ touch technology, such as the MSP430FR2633 MCU, enable robust, versatile and low-power capacitive sensing-enabled applications. With support for elegant buttons, sliders and wheels that are easy to clean as well as moisture and food resistant cooking tools can do more than ever before.

Additionally, wake-on-touch and wake-on-proximity capabilities enabled by CapTIvate technology reduce energy use without sacrificing performance and help ovens and cooktops meet Energy Star standards. CapTIvate touch technology can help make kitchens “life-proof.”

Additional Resources:

- Learn more about CapTIvate technology.
- Watch the “MSP MCUs featuring CapTIvate Technology Training Series.”
- Explore cooking range solutions from TI.

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