

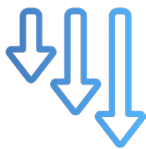
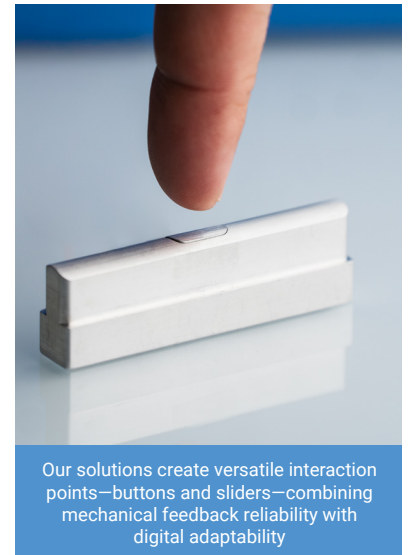
# Piezo Solid-State Button

## FROM UNCERTAINTY TO INTUITIVE CONTROL

Boréas Piezo Solid-State technology brings physical confirmation to modern interfaces, delivering premium tactile experiences that capacitive-touch controls lack. Our solutions create versatile interaction points—buttons and sliders—combining mechanical feedback reliability with digital adaptability while enhancing both functionality and aesthetics in smart home and consumer electronics through interfaces you can feel, not just see.

## SOLVING THE CAPACITIVE TOUCH DILEMMA

Today's devices increasingly rely on capacitive-touch controls that sacrifice tactile feedback for visual minimalism. Without physical confirmation, users question if inputs registered, leading to repeated attempts and frustration. Touch-only interfaces cause higher error rates, create accessibility barriers, and demand constant visual attention. Though manufacturers attempt workarounds with visual and audio cues, they fall short of what users truly need: the unmistakable physical confirmation that comes only through touch—precisely what our Piezo Solid-State technology addresses.



### Error-Reducing Tactile Confirmation

Piezo interfaces deliver unmistakable feedback, significantly reducing input errors in buttons and sliders



### Premium, Customizable Feel

Our technology offers programmable tactile profiles for functions and contexts, from clicks to resistance points

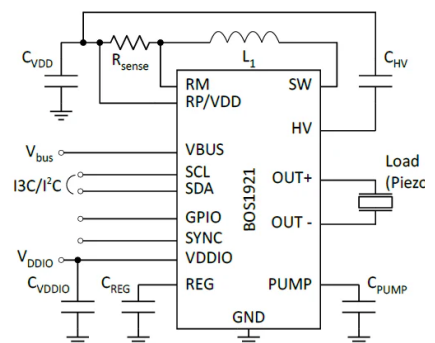


### Seamless Aesthetic Integration

One interface system delivers multiple functions while maintaining sleek surfaces without compromising design

## POWERED BY OUR CAPDRIVE® TECHNOLOGY: BOS1921

- ↳ High-Voltage Low Power Piezo Driver
  - Drives 100 nF at 190 Vpk-pk and 300 Hz while consuming only 350 mW
  - Drives Capacitive Load up to 820 nF
  - Energy Recovery
  - Differential Output
  - Miniature Solution Footprint, WLCSP 2.1x1.7 mm
  - Small Solution Footprint, QFN 4x4 mm
  - Low BOM cost
- ↳ Advanced Piezo Sensing Capabilities
  - 7 mV Sensing Resolution
  - Interrupt Generation
  - Automatic Triggering of Haptic Feedback
- ↳ Integrated Digital Front End with I3C/I2C
  - 1024 sample Internal FIFO Interface
  - 1.8V to 5.0V Digital I/O Supply
  - Waveform Synthesizer (WFS)
  - Supports Continuous Waveforms Playback
  - State Retention in SLEEP Mode
- ↳ Fast Start Up Time of Less Than 300  $\mu$ s
- ↳ Multi-Actuator Synchronization
- ↳ Wide Supply Voltage Range of 3 V to 5.5V



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