

Introducing Lattice's New iCE40 Ultra™ for Mobile Consumer Platforms

Consumer mobile hardware developers face an increased pressure to create devices that are smaller, lower cost and have longer battery life — and they need to hit the market immediately. Our latest addition to the iCE40 FPGA family empowers developers to create exciting new user experiences while delivering value and performance.

More capable. Smaller footprint.

75%
lower power than
our previous family

5x
more hardened
IP than the
competition

30%
smaller package
size than the
competition

3x
more LUT
density than the
competition

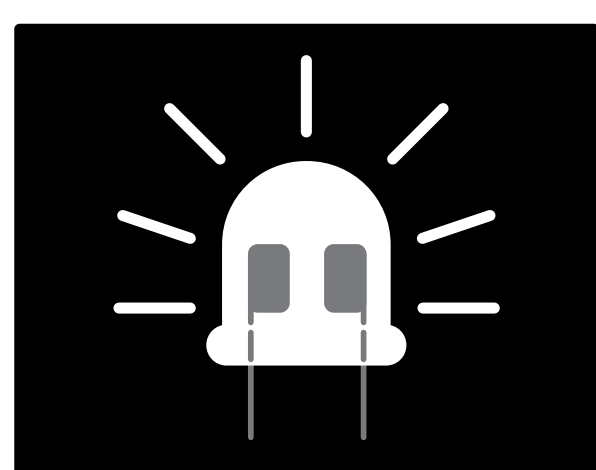
Unsurpassed integration of hardened IP
in an incredibly small package size

Reduced chip size and power consumption with
integrated IR and RGB current sinks in one device.

2.06mm
2.06mm
0.45mm



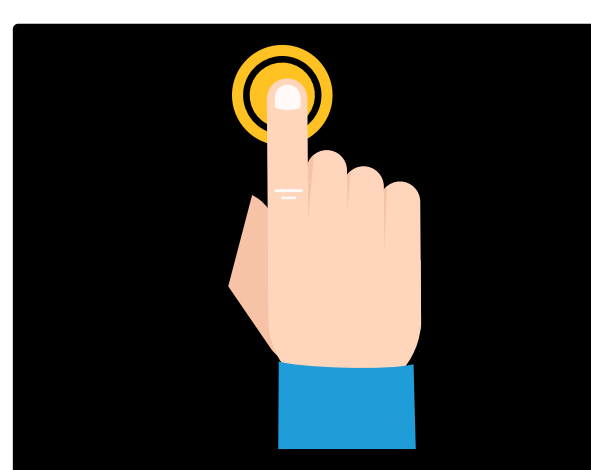
The most capable, customizable device for performing common functions related to:



IR remote



Barcodes



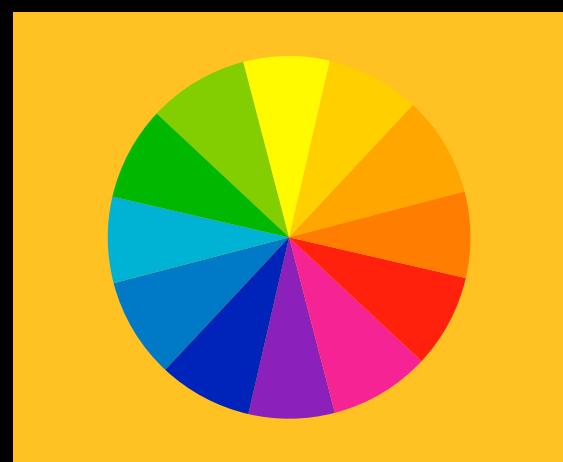
Touch



User identification

Flexibility to differentiate.

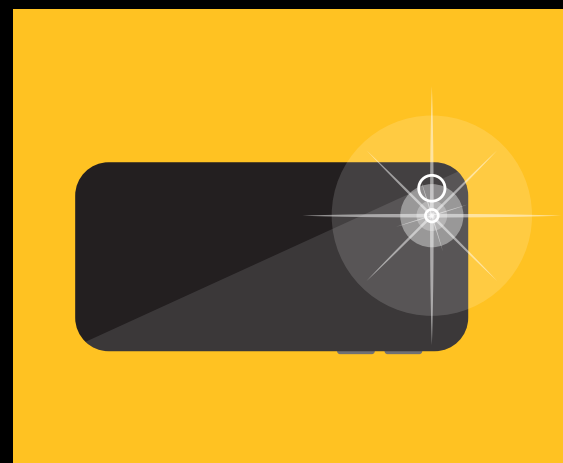
Programmability speeds customization of killer functions like:



User stimulated
colors



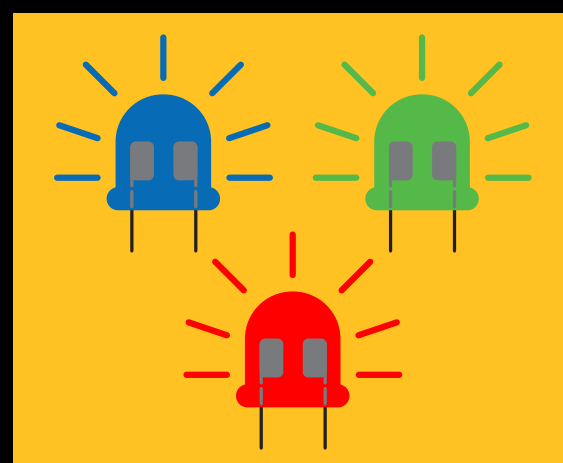
Shake
to wake



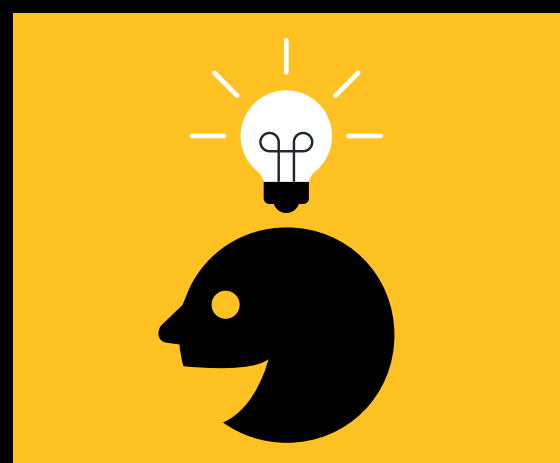
Camera Flash



Pedometer



Breathing
effects



You define it!

Upgrade. Innovate. Reduce Cost.

Integrated hard IP &
programmable logic
enable rapid
customization

Three 24mA current
sinks for RGB LED
drivers

500mA constant
current sink for IR /
high bright LEDs



Instant on capability
with integrated
non-volatile memory

Small packages to
reduce board area,
complexity and cost

Production ready
proven solutions
for Smart Remote,
Barcode, Breathing
LED driver, etc.

Deliver killer features — fast

latticesemi.com/ice40ultra