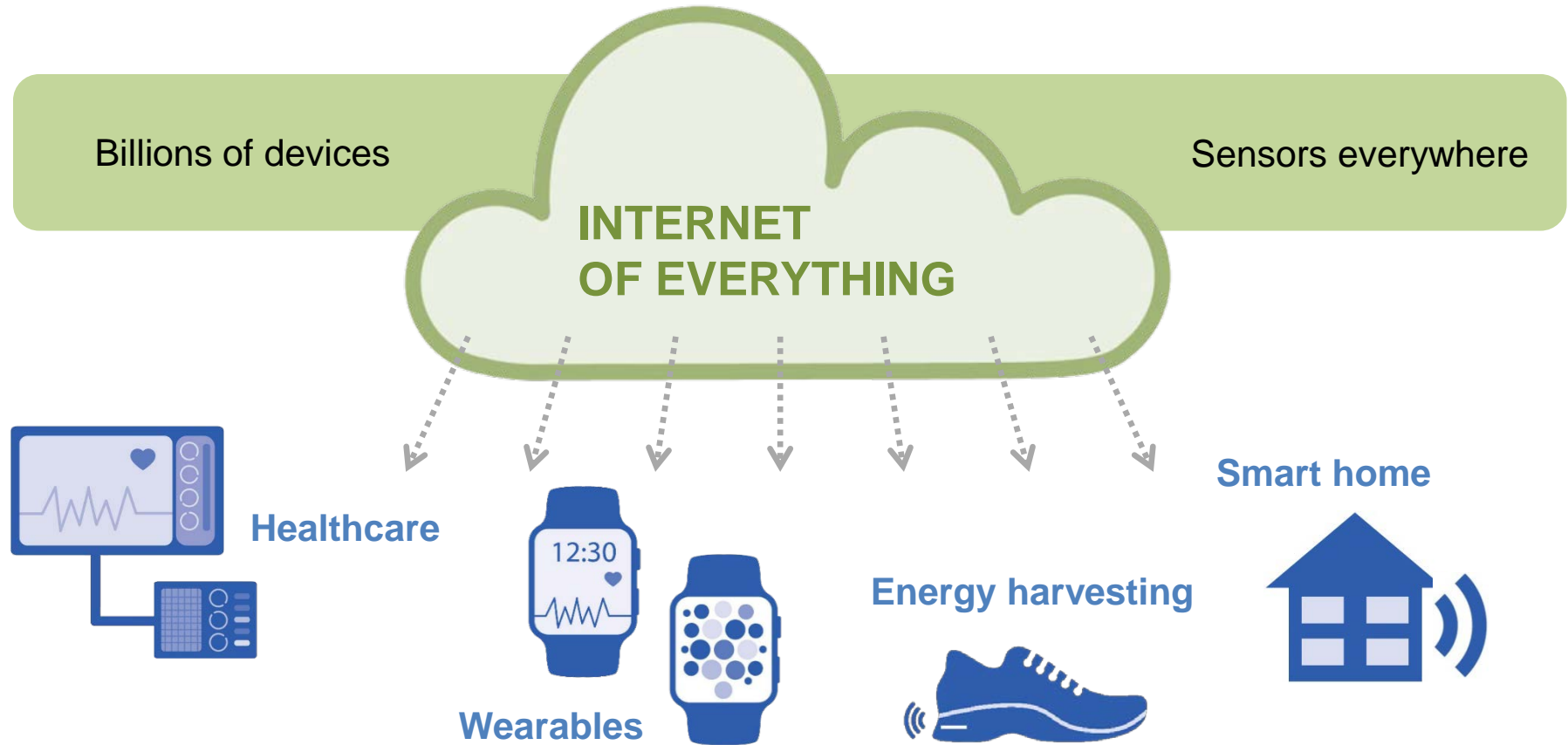


CeraCharge™

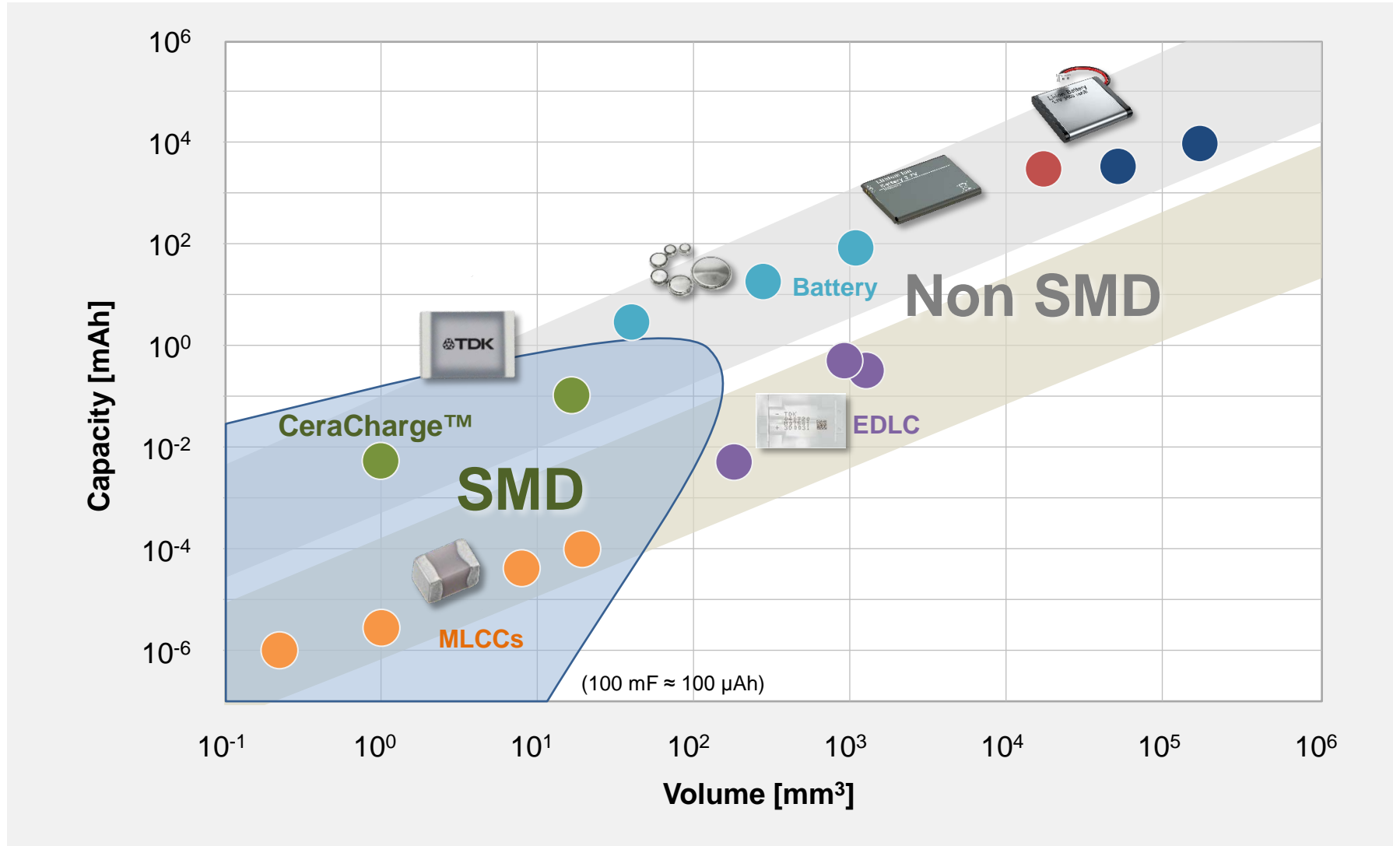
World's first rechargeable solid-state SMD battery

Demand for a new battery technology

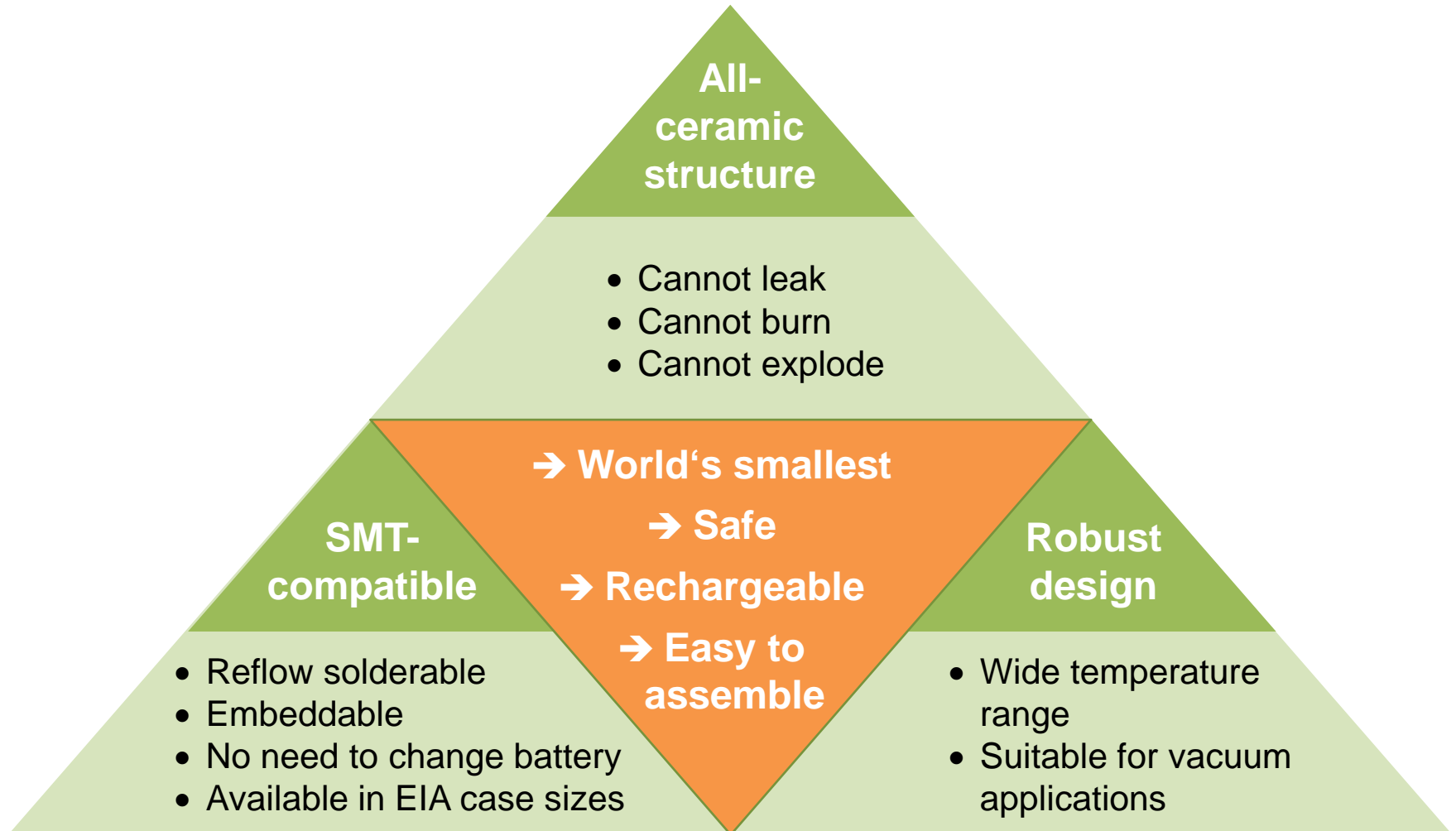


New application fields drive the demand for compact, safe, rechargeable energy sources

Comparison of energy storage devices



Unique features of CeraCharge



CeraCharge – World’s first rechargeable solid-state SMD battery

CeraCharge 1812

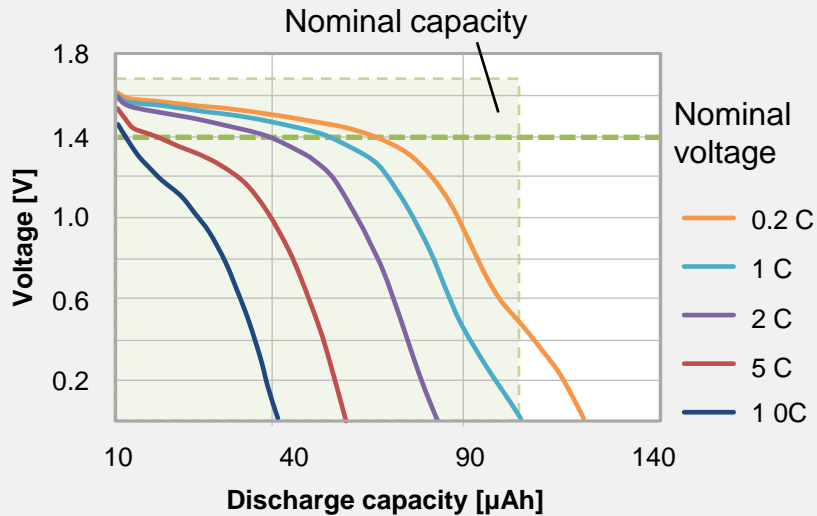
| | | |
|---------------------------|--------------------|-----------------|
| Nominal voltage | [V] | 1.4 |
| Operating voltage | [V _{op}] | 0 to 1.6 |
| Nominal capacity | [μAh] | 100 ±20 |
| Nominal discharge current | [μA] | 20 |
| Operating temperature | [°C] | -20 to +80 |
| Case size | [EIA] | 1812 |
| Dimensions | [mm] | 4.4 x 3.0 x 1.1 |
| Initial inner resistance | [Ω] | <200 |
| Weight | [g] | 0.04 |



CeraCharge offers 1000 times the capacity of a capacitor in the same case size

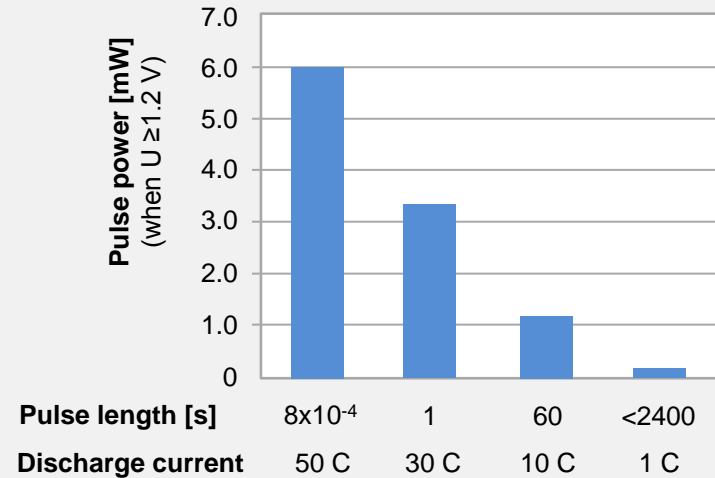
CeraCharge features fast and pulsed discharging

Typical discharge curves



1C = 100 μA

Typical pulse power

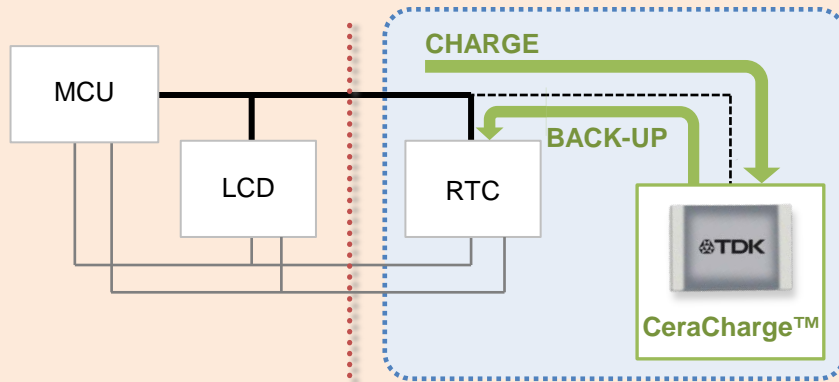


Can be connected in both series and parallel for maximum design flexibility

Main applications for CeraCharge

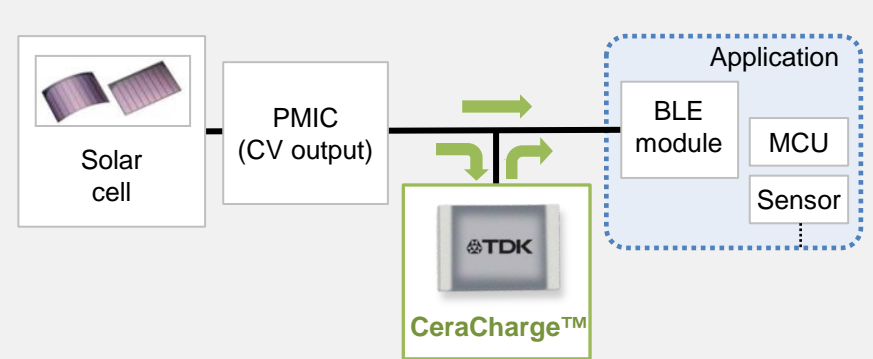
Real-time clock

Backup battery



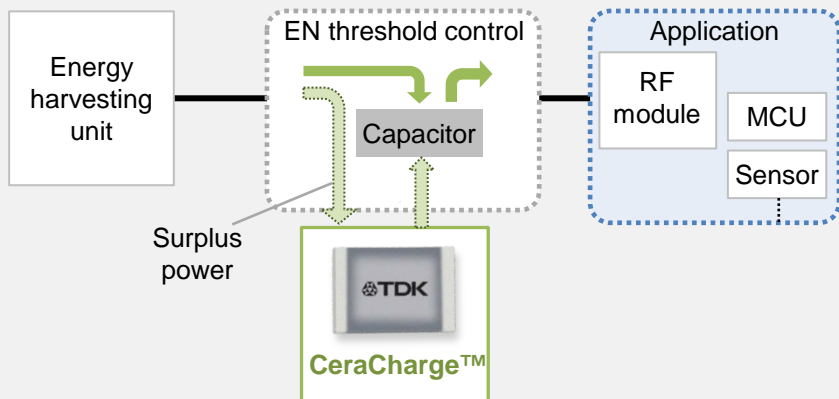
Internet of Things: Beacon

Energy storage (battery)



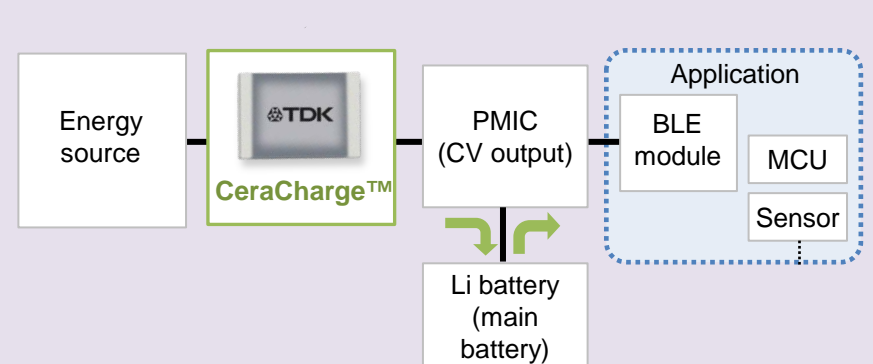
Energy harvesting

Energy storage



Wearables

Sub-battery for voltage and current smoothing



Outlook

Samples available in 1812

Mass production starting Summer 2019

All Types in R&D Stage





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