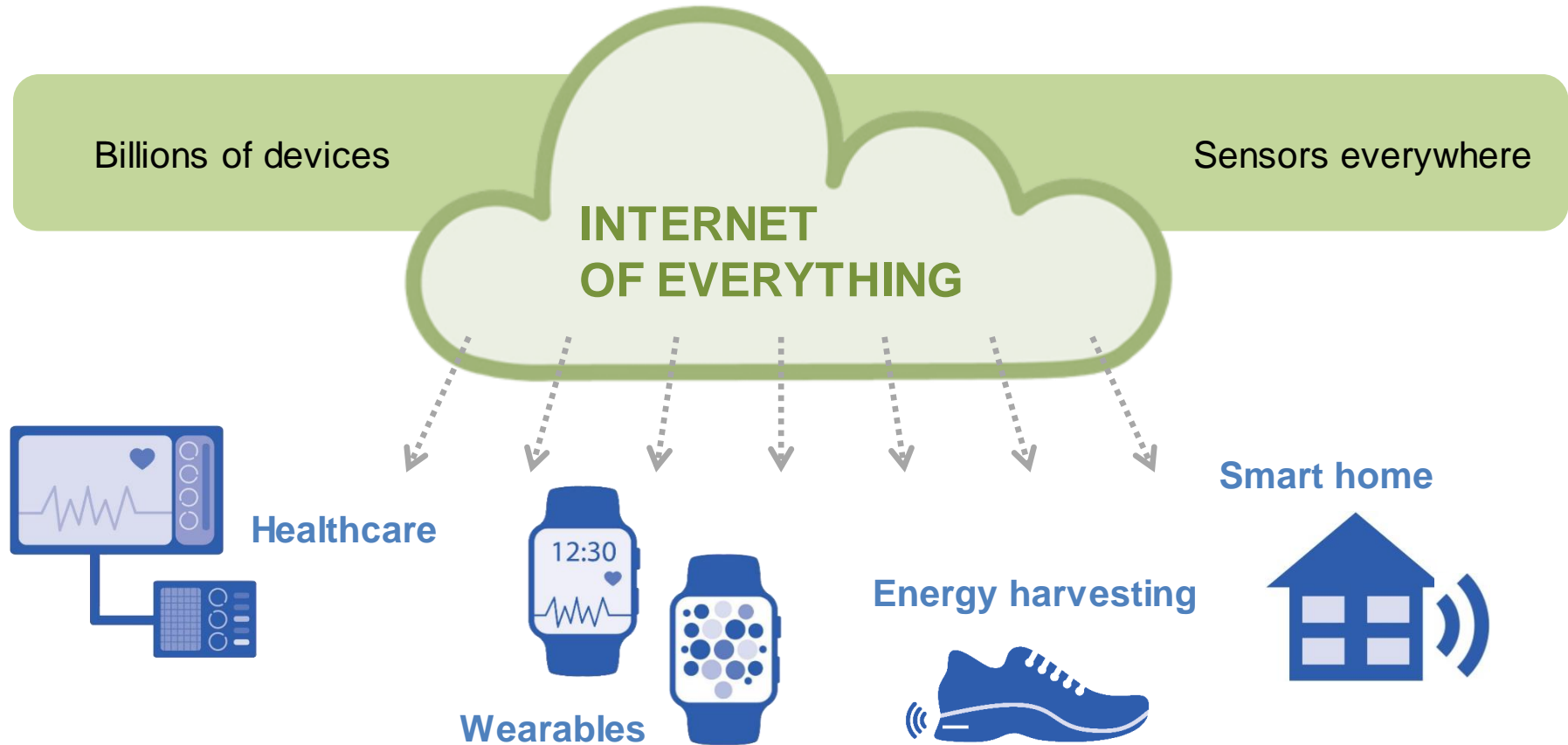


CeraCharge™

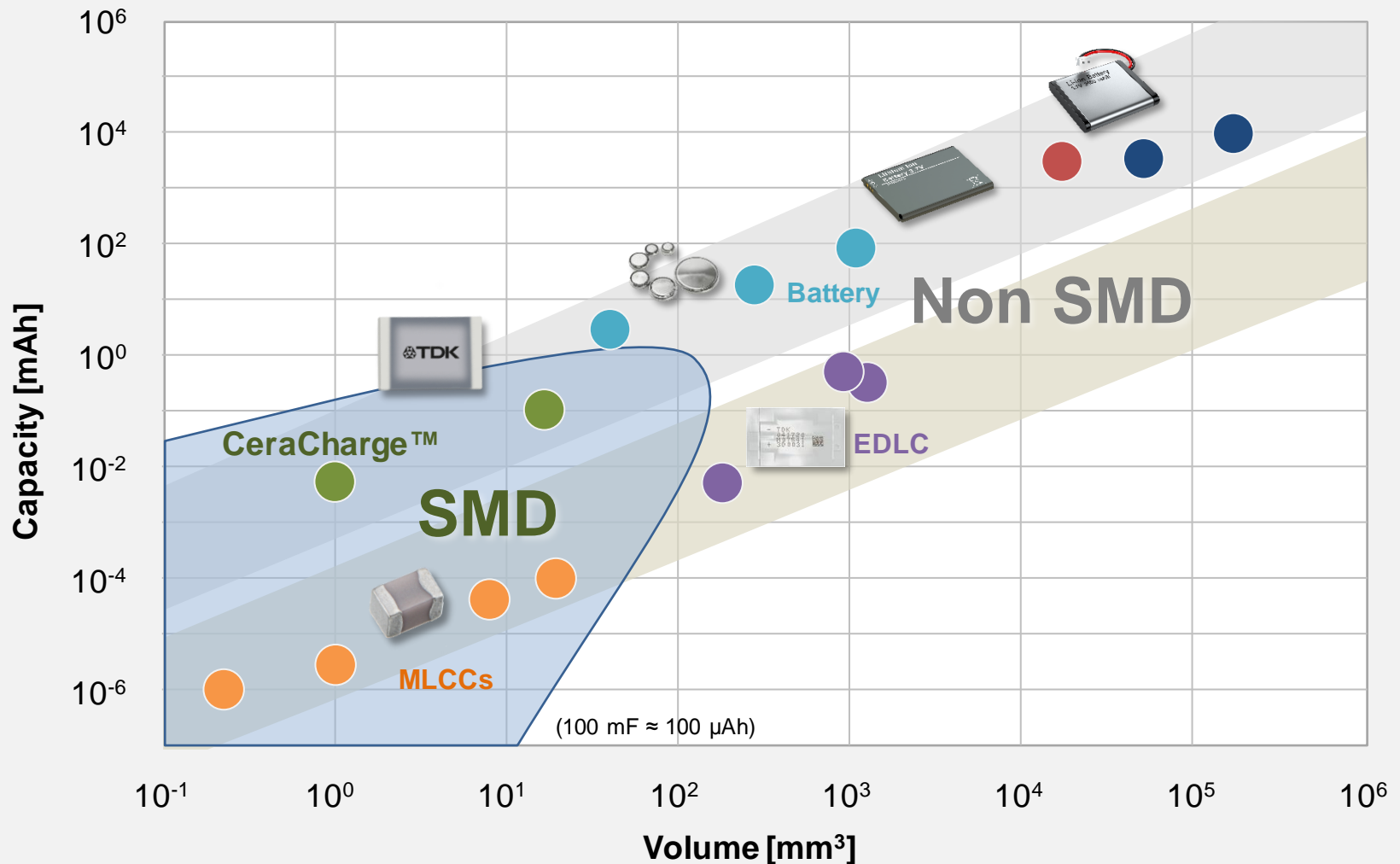
World's first rechargeable solid-state SMD battery

Demand for a new battery technology

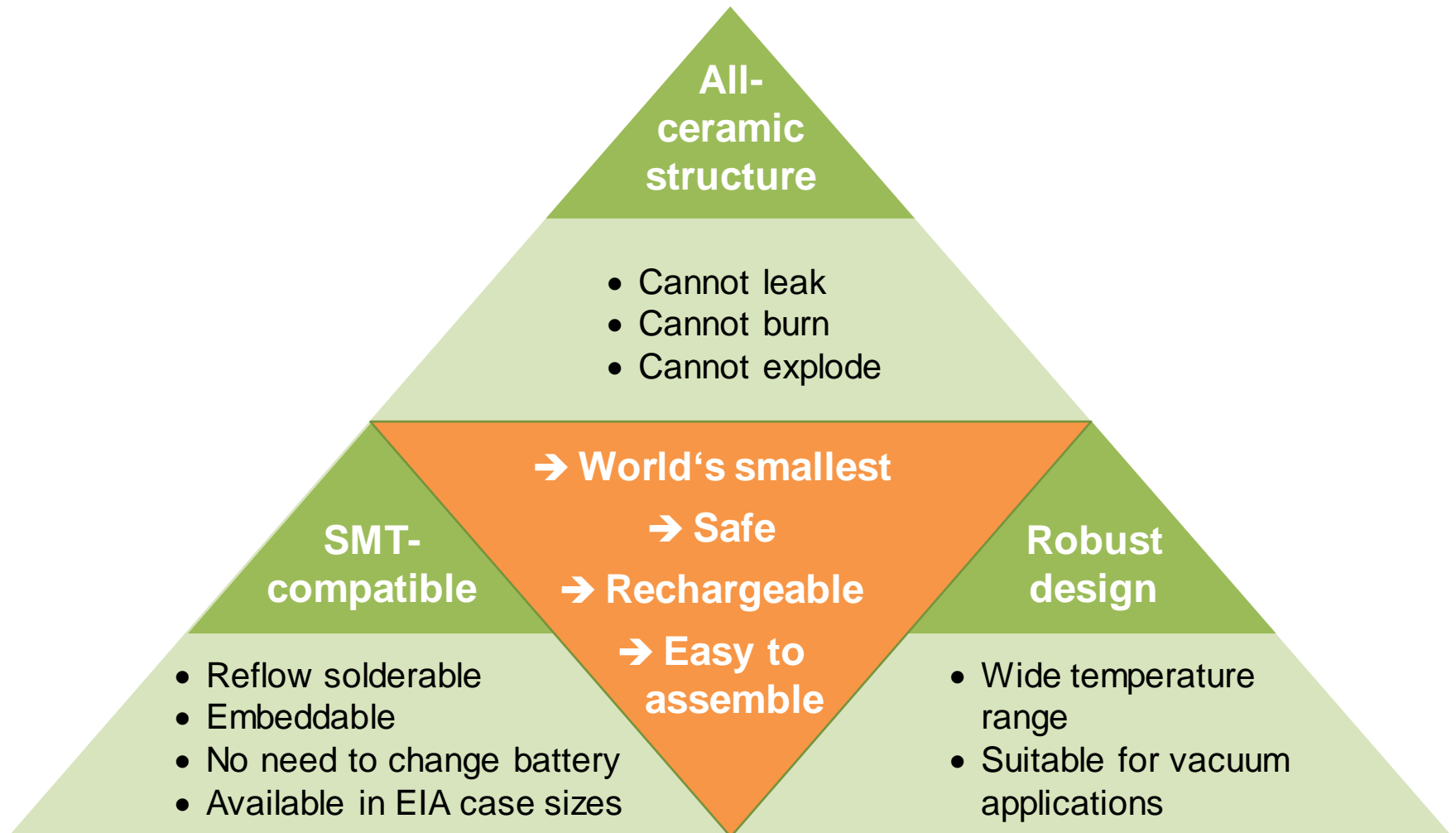


New application fields drive the demand for compact, safe, rechargeable energy sources

Comparison of energy storage devices



Unique features of CeraCharge



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

CeraCharge 1812

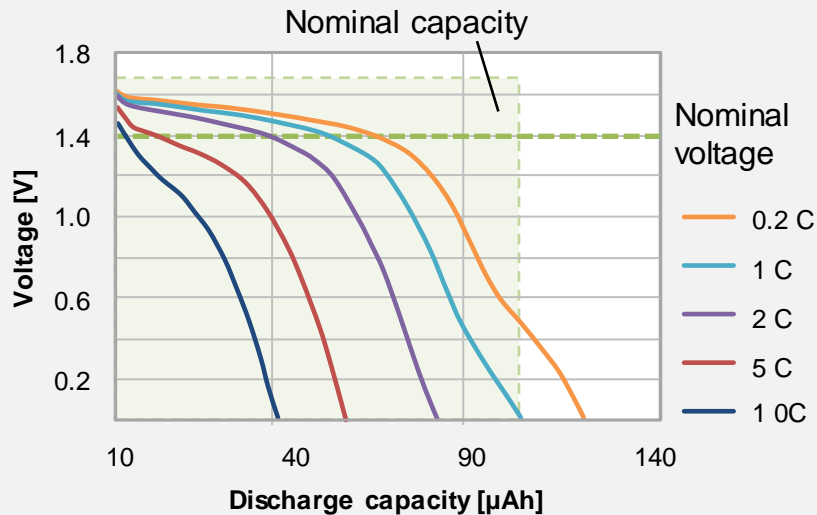
Nominal voltage	[V]	1.4
Operating voltage	[V _{op}]	0 to 1.6
Nominal capacity	[μAh]	100 ±20
Nominal discharge current	[μA]	20
Operating temperature	[°C]	-20 to +80
Case size	[EIA]	1812
Dimensions	[mm]	4.4 x 3.0 x 1.1
Initial inner resistance	[Ω]	<200
Weight	[g]	0.04



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

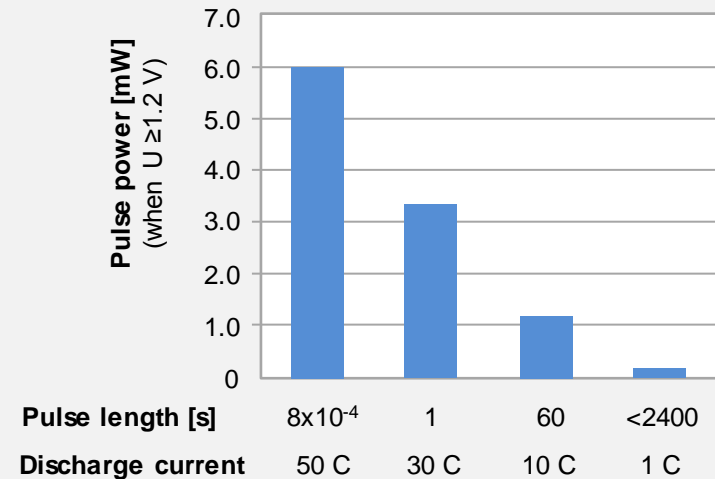
CeraCharge features fast and pulsed discharging

Typical discharge curves



1C = 100 µA

Typical pulse power

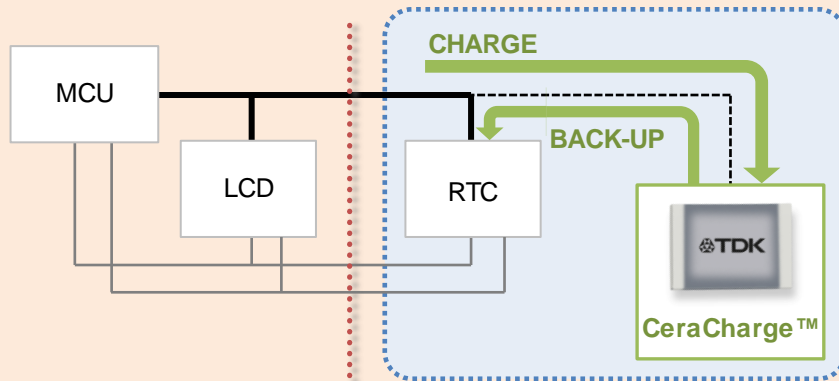


Can be connected in both series and parallel for maximum design flexibility

Main applications for CeraCharge

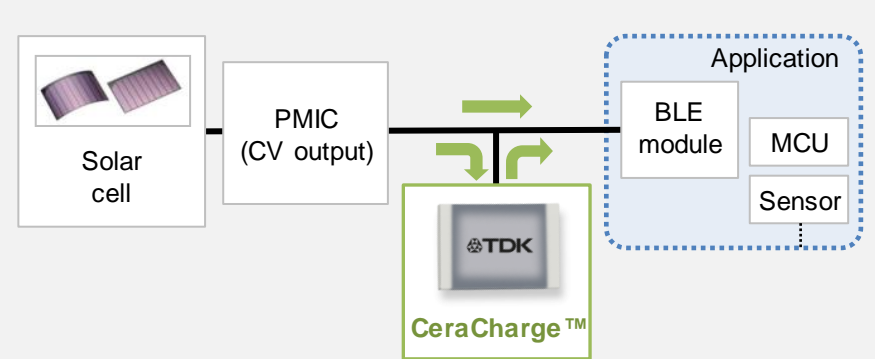
Real-time clock

Backup battery



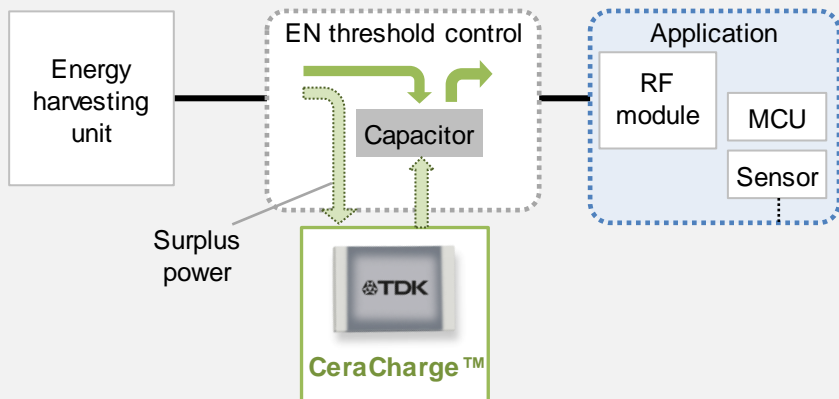
Internet of Things: Beacon

Energy storage (battery)



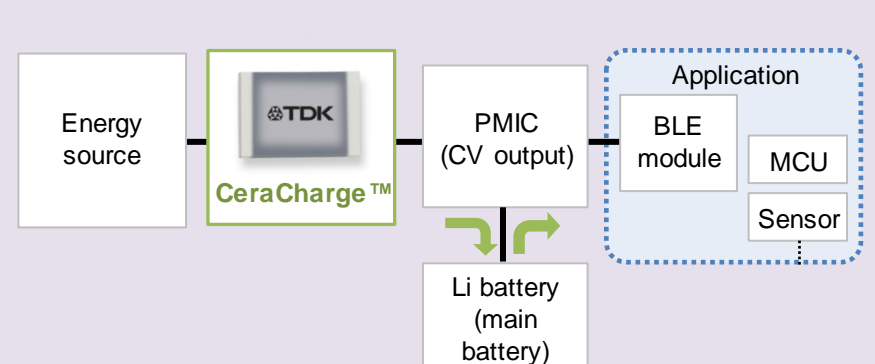
Energy harvesting

Energy storage



Wearables

Sub-battery for voltage and current smoothing



Outlook

Samples available in 1812

Mass production starting Spring 2019

All Types in R&D Stage





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