

EnerCera[®] Pouch ET382704P-H



Key Features of EnerCera Pouch

- Ultra-thin lithium-ion rechargeable battery, ideal for IoT and compact electronics.
- Proprietary crystal-oriented ceramic technology enables:
 - High energy capacity
 - Thin and compact design
 - Low internal resistance
 - Excellent heat resistance
- Only 0.45 mm thick, suitable for embedding in IC cards. Compliant with ISO/IEC 10373-1 bending durability.

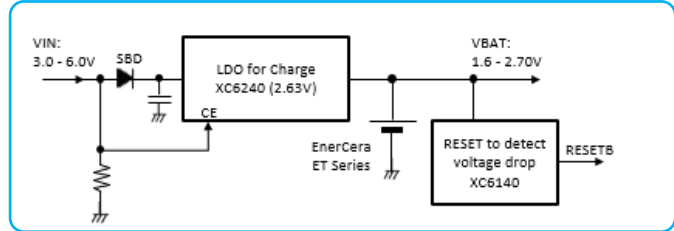
Features of ET382704P-H

- Supports constant-voltage and fast charging.
- Resistant to degradation even after over-discharge (reusable after recharge)

	Fast charging
Model Number	ET382704P-H
Dimensions (without terminals)	38mm × 27mm
Thickness (with terminals)	0.45mm
Nominal Capacity	20mAh
Nominal Voltage	2.3 V
Charging Method	Constant Voltage (CV) charging (No current control required)
Charging Voltage	2.7V
Operating Voltage	1.5V ~ 2.7V
(Ref.) Peak Discharge Current ※1	300mA
Operation Temperature	-40°C ~ 70°C

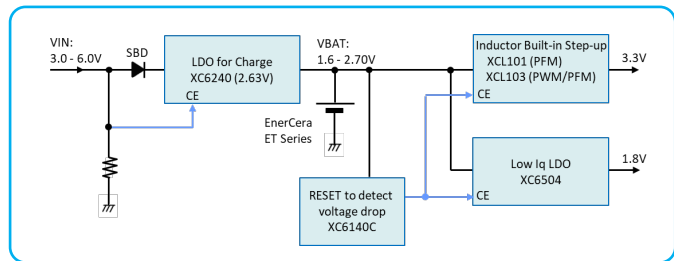
※1 Voltage drop is less than 0.5V with continuous discharge for 0.1 sec. (at 25°C)

Example charging circuit



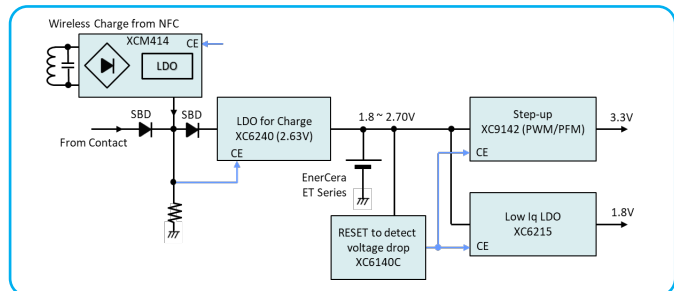
Select a charging LDO that stays below 2.7V, considering temperature and tolerance. To reduce battery drain when power is off, use reverse current protection and LDO standby control. A voltage detector is recommended to prevent over-discharge.

Example Circuit for IoT Applications



3.3V supplied by boost DC/DC, 1.8V by low-power LDO. Power ICs are controlled by a voltage detector optimized for battery voltage drop and recharge timing.

Example Circuit for Smart Card



Example of a power configuration using ultra-thin components (≤ 0.35 mm) for smart cards. Supports power supply from both NFC antenna and contact terminals. Components for 3.3V and 1.8V outputs are selected with height restrictions in mind, including coils and other peripherals.

【Precautions】 Please refer to the second page before using this product. Please obtain the “User Guide” and read the sections “Safety Precautions” and “Usage Notes” before use.

Precautions

EnerCera[®] Pouch ET382704P-H

EnerCera batteries sold online are intended for experimental and evaluation purposes only.

If you are considering using them for mass production, please consult with us in advance.

These products are not intended for use by general consumers, including charging/discharging, integration into devices, or removal from devices.

Please contact us before using this product in any of the following applications:

- Nuclear control systems, transportation equipment (railways, vehicles, aircraft, ships, etc.), medical devices, safety equipment, or any systems, machinery, or devices where failure could pose a risk to human life or property.
- Any other applications requiring exceptionally high reliability or safety, similar to those listed above.

Please consult us in advance, as this product has limitations for mounting processes involving heat.

Note: This product is not compatible with reflow soldering.

This product is shipped in a charged state. Do not short-circuit the positive (+) and negative (-) terminals.

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