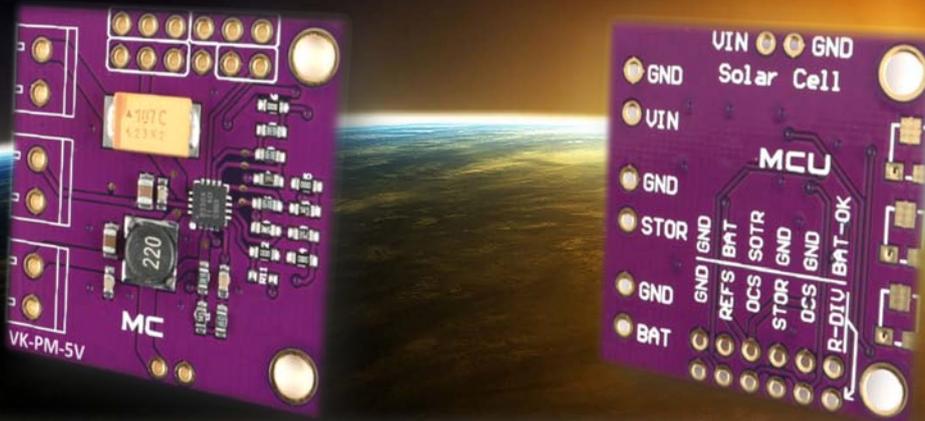




Solar Cell Power Management Board

Type VK-PM-5V



Specifications

Description	The circuit board is designed to collect and manage microwatt (μW) to milliwatt (mW) power generated from various DC sources such as photovoltaic (solar) cells or thermoelectric generators. This unit implements a high efficiency boost converter/charger for products and systems with tight power and operational requirements. This DC-DC boost converter/charger requires only microwatts of power to start working.
Characteristic	<ul style="list-style-type: none"> • Ultra Low Power, High Efficiency DC-DC Boost Converter/Charger • Continuous energy harvesting from low voltage input supply: $V_{IN} \geq 80\text{mV}$ (typical) • Ultra-low quiescent current: $I_Q < 330\text{nA}$ (typical) • Cold start voltage: $V_{IN} \geq 330\text{mV}$ (typical) • Programmable Dynamic Maximum Power Point Tracking (MPPT)
Energy source input voltage	0.13V - 3V
Energy storage component Supercapacitor or battery voltage	2.5V - 5.25V
Working environment temperature	-40 ~85 °C
Boost mode switching frequency	up to 1MHZ
Working mode	cold start mode, boost mode, thermal protection cut-off mode

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