

Figure 3



This 4F ultracapacitor from Maxwell measures 17.2x4.5 mm and weighs 5.5g. According to the manufacturer, although officially rated at 2.5V, such units last for many years and do not fail catastrophically when operated at 2.7V. Thus, four units in series act as a 1F energy reservoir, which supplies peak-current demand in a fuel-cell system that replaces a 10.8V, three-cell Li-ion battery.