7 to 16-cell High-Accuracy Battery Monitor and Protector with Coulomb Counting

#### **Key Features**

Cells

- Integrates High Side N-FET driver
- 1 x High Voltage and 2 x Low Voltage GPIOs

### Why Buy?

- High Accuracy:  $\pm 5$ mV@25° C,  $\pm 7.5$ mV @-20° C~65° C
- Soft-start function to eliminate predischarge circuit
- High integrated passive balance current, 58mA





**GPIO1HV** 

SDO ( SOL/SOX

Host

GPIO3/nCS

GPICE I

MP2797











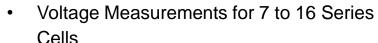
- Battery Backup and UPS





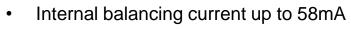


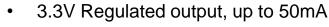












I2C or SPI communication with CRC option



- E-bike, E-scooter
- Power and Gardening Tools
- For Customer and Distributor Use Only

7 to 14-Cell High-Accuracy Battery Monitor and Protector with Coulomb Counting

#### **Key Features**

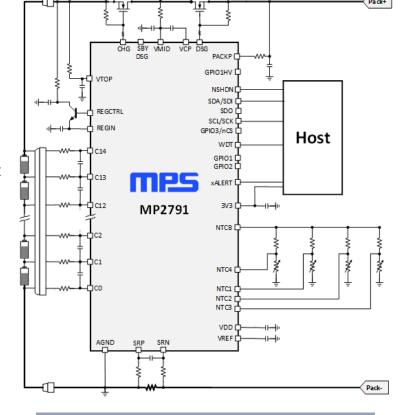
- Voltage Measurements for 7 to 14 Series Cells
- 4 NTCs and die temperature measurements
- Internal balancing current up to 58mA
- External balancing with transistor or MOSFET can support higher current
- 3.3V Regulated output, up to 50mA
- < 1uA in shutdown mode with 3.3V LDO disabled</li>
- 1 x High Voltage and 2 x Low Voltage GPIOs
- I2C or SPI communication with CRC option

### **Applications**

- E-bike, E-balancing bike
- Outdoor Energy Storage Systems

### Why Buy?

- High Accuracy: ±5mV@25° C, ± 7.5mV@-20° C~65° C
- Soft-start function to eliminate predischarge circuit
- High integrated passive balance current, 58mA













#### 7 to 16-Cell High-Accuracy Battery Monitor and Protector

### **Key Features**

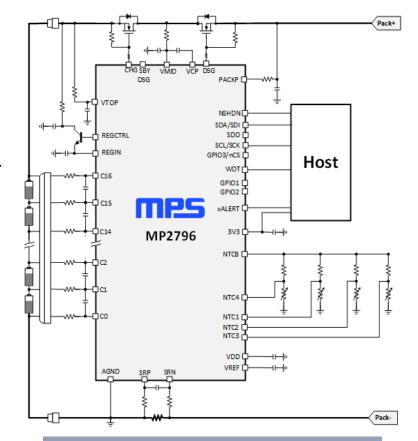
- Voltage Measurements for 7 to 16 Series Cells
- Current Measurements with Accuracy:  $\pm$ 1.5% (-40 $^{\circ}$  to 85 $^{\circ}$  C,  $\pm$  100mV Sense Range)
- 4 NTCs and die temperature measurements
- Internal balancing current up to 58mA
- External balancing with transistor or MOSFET can support higher current
- 3.3V Regulated output, up to 50mA
- < 1uA quiescent current at shutdown mode with 3.3V LDO turned off
- 2 x Low Voltage GPIOs
- I2C or SPI communication with CRC option

### **Applications**

- · E-bike, E-scooter
- Outdoor Energy Storage Systems

### Why Buy?

- Soft-start function to eliminate predischarge circuit
- High integrated passive balance current, 58mA



TQFP-48 (7mm×7mm) Package









# 7 to 16-Cell High-Accuracy Battery Monitor with Coulomb Counting

### **Key Features**

- Voltage Measurements for 7 to 16 Series Cells
- 4 NTCs and die temperature measurements
- Internal balancing current up to 58mA
- External balancing with transistor or MOSFET can support higher current
- 3.3V Regulated output, up to 50mA
- < 1uA quiescent current at shutdown mode with 3.3V LDO turned off
- 1 x High Voltage and 2 x Low Voltage GPIOs
- Support Random Cell connection
- I2C or SPI communication with CRC option

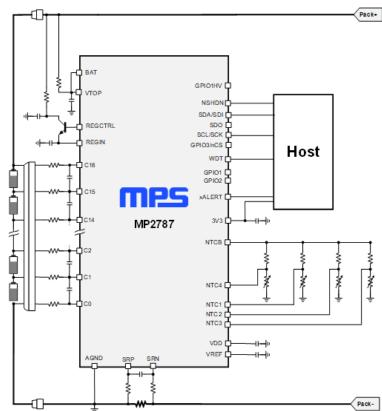
### **Applications**

- Energy Storage System (ESS)
- Power and Gardening Tools
- Battery Backup and UPS

### Why Buy?

- High Accuracy:  $\pm 5$ mV@25° C,  $\pm$  7.5mV@-20° C~65° C
- High integrated passive balance current, 58mA





TQFP-48 (7mm×7mm) Package









# 7 to 10-Cell High-Accuracy Battery Monitor and Protector with Coulomb Counting

### **Key Features**

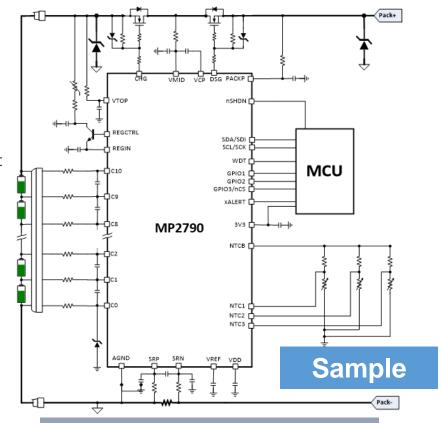
- Voltage Measurements for 7 to 10 Series Cells
- Current Measurements with Accuracy:  $\pm$ 1.5% (-40° to 85° C,  $\pm$  100mV Sense Range)
- 3 NTCs and die temperature measurements
- Internal balancing current up to 58mA
- External balancing with transistor or MOSFET can support higher current
- 3.3V Regulated output, up to 50mA
- < 1uA quiescent current at shutdown mode with 3.3V LDO turned off
- 2 x Low Voltage GPIOs

### **Applications**

- · E-balancing bike
- Outdoor Energy Storage Systems

### Why Buy?

- High Accuracy:  $\pm 5$ mV@25° C,  $\pm$  7.5mV@-20° C~65° C
- Soft-start function to eliminate predischarge circuit
- High integrated passive balance current, 58mA



TQFP-48 (7mm×7mm) Package









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