

Response to: Can you please recheck for FTEMP

Apologies for any confusion earlier. Let's clarify the configuration settings for the BQ40Z50-R2 when using TS2 for cell temperature and TSInt for FET temperature.

1. Temperature Enable Configuration:

- TS2: Enable for cell temperature measurement.
- TSInt: Enable for FET temperature measurement.
- TS1 and TS3: Disable, as they are not used.

Settings:

- TS4 = 0
- TS3 = 0
- TS2 = 1
- TS1 = 0
- TSInt = 1

2. Temperature Mode Configuration:

- TS2: Set to report cell temperature.
- TSInt: Set to report FET temperature.

Settings:

- TS2 Mode = 0 (cell temperature)
- TSInt Mode = 1 (FET temperature)
- TS1 Mode = 0

- TS3 Mode = 0

- TS4 Mode = 0

3. DA Configuration Settings:

- FTEMP: Determines how FET temperature is reported.

- 0: Use the maximum temperature from enabled sensors.

- 1: Use the average temperature from enabled sensors.

Since only TSInt is used for FET temperature, both settings will yield the same result. However, setting FTEMP = 0 is

typical for single-sensor setups.

- CTEMP1 and CTEMP0: Determine the cell temperature reported by the Temperature() command.

- 00: Highest cell temperature.

- 01: Average of all enabled thermistors.

- 10: Lowest cell temperature.

- 11: Reserved.

To report the highest cell temperature, set CTEMP1 = 0 and CTEMP0 = 0.

Settings:

- FTEMP = 0 (Maximal)

- CTEMP1 = 0

- CTEMP0 = 0

4. IT Gauging Ext Configuration:

- TS1 and TS0: Control the temperature reference used for gauging calculations.

- 00: Use the internal temperature sensor (TSInt).
- 01: Use the average of enabled external thermistors.
- 10: Use the minimum of enabled external thermistors.
- 11: Use the maximum of enabled external thermistors.

Since TS2 is used for cell temperature, set TS1 = 1 and TS0 = 1 to use the maximum temperature from enabled sensors.

Settings:

- TS1 = 1
- TS0 = 1

Summary of Configuration Settings:

Setting	Value
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Temperature Enable	TS4=0, TS3=0, TS2=1, TS1=0, TSInt=1
Temperature Mode	TS4 Mode=0, TS3 Mode=0, TS2 Mode=0, TS1 Mode=0, TSInt Mode=1
DA Configuration FTEMP	0 (Maximal)
DA Configuration CTEMP1	0
DA Configuration CTEMP0	0
IT Gauging Ext TS1	1
IT Gauging Ext TS0	1

By configuring these settings, the BQ40Z50-R2 will use TS2 for cell temperature reporting and TSInt for FET temperature reporting, ensuring accurate measurements and appropriate protections.