To Our customers

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SYSTEM MEMORY BUISNESS DEV.
MCU SOLUSIONS BUSINESS UNIT
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Recovering from the hang-up after stopping communication

1 Outline

In communication, usually, STOP CONDITION command makes the communication stop. In order to resume communication, START CONDITION command is issued.

Limited to the following part number, if the time lag between STOP CONDITION and START CONDITION is long, it is rarely but, in some case, that device hangs up (any commands are rejected). This notification indicates how to recover from this phenomenon.

2 Applicable Product

MB85RC16VPNF-G-JNE1
MB85RC16VPNF-G-JNERE1

3 Hang up

After stopping the communication by issuing STOP CONDITION, in some case, START CONDITION command is rejected, keeping device stop.

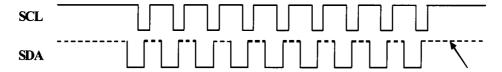
4 Recovering from the hang up

When the device responds with unpredictable signals, issue following (a), (b) or (c).

- (a) Issue additional software reset
- (b) Issue a part of software reset
- (c) Re-issue the same command

a. Software reset

Fig.1 shows the software reset sequence. When the master drives SDA, do not force SDA to "H", because the device may drive SDA to "L".



Hi-Z status by pull up resistor

Fig.1 Software Reset

b. A part of software reset

Fig.2 shows a part of software reset. After the master designates START CONDITION, keep SDA "H" with SCL "L".

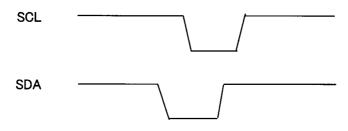


Fig.2 A part of software reset

c. Re-issuing the same command

Re-issue the same command (Re-try), if the device responds with unpredictable signals (e.g. ACK is expected but NACK returns.).

- End of Attached Material -