

# RENESAS TECHNICAL UPDATE

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Product Category	MPU/MCU		Document No.	TN-SH7-A817A/E	Rev.	1.00
Title	The error correction and addition about LCD controller (LCDC)		Information Category	Technical Notification		
Applicable Product	SH7763 Group	Lot No.	Reference Document	SH7763 Hardware Manual (REJ09B0256-0200)		
		ALL				

We would like to inform you of the following error correction and addition to the description of the LCD controller (LCDC) in the applicable products.

## 1. 37.4.6 Power-Supply Control Sequence, Paragraph 2

### [Error]

Figures 37.4 to 37.7 are timing charts that show outlines of power-supply control sequences and table 37.6 is a summary of available power-supply control sequence periods.

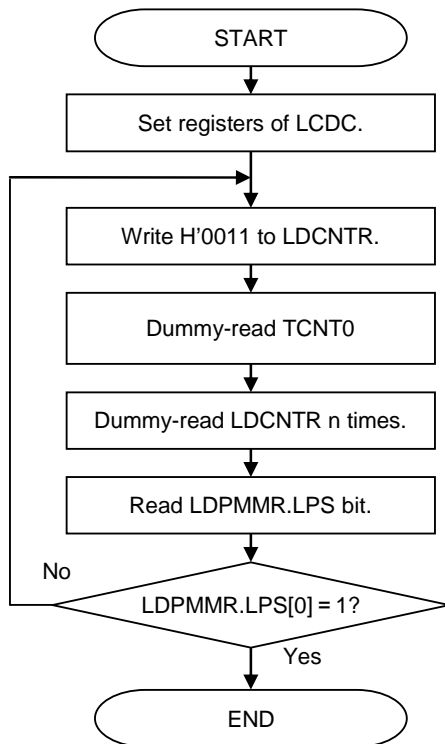
### [Correction]

Figure 37.4 gives the flowcharts for power-supply control sequences, figures 37.5 to 37.8 are timing charts that show outlines of power-supply control sequences, and table 37.6 is a summary of available power-supply control sequence periods.

## 2. Added Figure 37.4

Figure 37.4 to 37.23 are re-numbered to Figure 37.5 to 37.24 respectively, then add new Figure 37.4.

(1) Power-on sequence (when EXTAL is selected as the input clock)



DON2 and DON are set to 1.

Dummy-read TMU/TCNT0 register 1 time.

The number of dummy-read.  $n = N/2 \times P/L + 2$

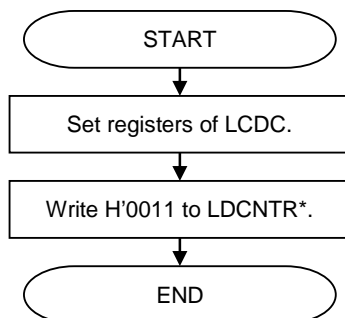
N: Setting for divisor (1, 2, 3, 4, 6, 8, 12, 24, 32)

P: Pφfrequency (MHz), L: External LCD input frequency (MHz)

E.g. A case where N: 3, P: Pφ=50MHz, L: LCDCLK=50MHz

$3/2 \times 50\text{MHz}/50\text{MHz} + 2 = 3.5 = 4$  (round up to discard the fractional part)

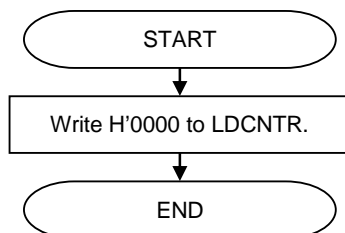
(2) Power-on sequence (when the peripheral clock is selected as the input clock)



DON2 and DON are set to 1.

Note: \* To access other registers of the LCDC after writing to LDCNTR, dummy-read TMU/TCNT0 register once beforehand.

(3) Power-off sequence



DON2 and DON are set to 0.

Note: After the power-off sequence, the procedure described in section 37.6.1 Procedure for Halting Access to Display Data Storage VRAM (DDR-SDRAM in Area 3) is required before selecting self-refreshing for the display data storage VRAM (DDR-SDRAM in area 3) or making a transition to standby mode or module standby.

Figure 37.4 Flowchart for Power-Supply Control Sequences

- End of report -