

OKI ELECTRONICS (HONG KONG) LTD.

OLMS64K SERIES 4-BITS LOW POWER MCU CHECK LIST

Part No.: M64164C

The function of this form is just for reminding the customer to (i) avoid commonly-made programming mistakes and, (ii) notice frequently overlooked or misunderstood hardware features of the caption MCU. The customer is required to fill in this form and submit it with all the other necessary files and documents when the code is released. The actual masking of the MCU is based on the code released by the customer - it is NOT based on the information given in this form. OKI and her distributors are not held liable for any discrepancies between the released code and the information given below.

(1) PACKAGE

Chip Form

80-pin QFP Form _____

(2) VOLTAGE SUPPLY

1.5V (Voltage Range = 1.25V - 1.7V)

3.0V (Voltage Range = 2.2 - 3.5V when duty cycle=1/2)

3.0V (Voltage Range = 2.0 - 3.5V when duty cycle=1/3 or 1/4)

(3) CONNECT THE UNUSED VSS PIN TO ... (See Chapter 7.3.1 of 'MSM64164 User's Manual')

VSS1 (For 1.5V MCU)

VSS2 (For 3.0V MCU)

(4) CLOCK GENERATION CIRCUIT (Mask Option)

With built-in capacitor C_G

(5) FAST CLOCK (400kHz RC OSCILLATOR)

Connect a 0.47μF capacitor between V_{DD} and V_{SSL} if fast clock is to be used

(6) USABLE ROM SIZE

4064 bytes

(7) INITIALIZATION OF RAM

Content of RAM area are random after power up – initialization must be done by software

(8) CONSTANT VOLTAGE SUPPLY FOR LOGIC CIRCUIT (VR)

Set BUPF=0 to save power, but set BUPF=1 when power supply may suffer from fluctuation

(9) 4.8 DIGIT DECADE COUNTER FOR A/D CONVERSION

Never write invalid data (i.e. any no. > 9) to any digit of the decade counter CNTA

(10) IS LCD DUTY CYCLE DEFINED IN MASK OPTION SAME AS THE SETTING OF DSPCON?

(*Note : To ensure normal operation, the setting of DSPCON must match with the duty cycle defined in the mask option)

1/2

1/3

1/4

(11) LCD OPERATING VOLTAGE

4.5V (Duty Cycle = 1/4 or 1/3)

3.0V (Duty Cycle = 1/2)

(12) L26-L33 OR OUTPUT PORTS (Mask Option - See Chapter 13.6 of 'MSM64164 User's Manual')

L26 L27 L28 L29 L30 L31 L32 L33 (*Note : Mark the output ports)

(13) LCD DRIVER MASK OPTIONS

In the real chip, any bit of any DSPRs undefined in the mask option cannot be read/written as general data RAM.

(14) SKIP INSTRUCTION

When SKIP condition is satisfied, a no. of idle machine cycles, equal to the no. of machine cycle(s) of the skipped instruction, will be inserted after the instruction which tests and set the SKIP condition.

We, _____, hereby confirm the correctness of information given in this completed form.

Signature & Company Chop

Date