



HE83016 APPROVAL AND TOOLING FORM

COMPANY NAME: _____ DATE: _____
 PART NUMBER: HE83016
 PROJECT NAME: _____
 CODE NUMBER: HE83016-
 PRODUCTION NUMBER _____ (by King Billion)

PRODUCTION INFORMATION:

Package Type:	<input type="checkbox"/> Package Form (_____)	<input type="checkbox"/> Chip Form
Ink:	Line one – _____	
	Line two – _____	
	Line three – _____	
Remark:		

CODE INFORMATIN:

File Name:	_____
Check Sum:	_____
Object Code length:	_____

DEVICE OPTION:

Operation Voltage: Two-Battery(3V) Three-Battery(4.5V) Other(_____ Volt)

Mask Options:

NAME	DESCRIPTION	Mask Option
MO_PORE	Internal Power On Reset	<input type="checkbox"/> Disable(0) <input type="checkbox"/> Enable(1)
MO_FCK MO_SCKN	Clock Mode Select	<input type="checkbox"/> Dual Clock (10) <input type="checkbox"/> Fast Only (11) <input type="checkbox"/> Slow Only (00)
MO_FXTAL	Osc. Type of Fast Clock	<input type="checkbox"/> RC(0) <input type="checkbox"/> Crystal(1)
MO_SXTAL	Osc. Type of Slow Clock	<input type="checkbox"/> RC(0) <input type="checkbox"/> Crystal (1)
MO_WDTE	Watch Dog Timer	<input type="checkbox"/> Disable(0) <input type="checkbox"/> Enable(1)
MO_FOSCE	Fast Clock Source Select	<input type="checkbox"/> Internal(0) <input type="checkbox"/> External(1)

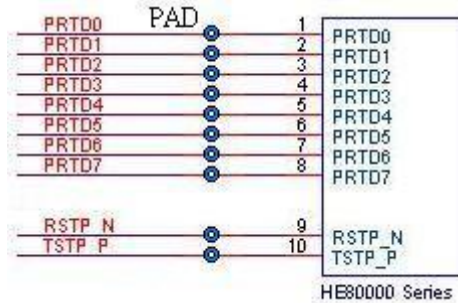


NAME	DESCRIPTION	Mask Option
MO_FRCI_S[2.0]	Internal Fast Clock Rate Select (If internal clock is selected.)	<input type="checkbox"/> ~990KHz(000) <input type="checkbox"/> ~1.1MHz(001) <input type="checkbox"/> ~1.3MHz(010) <input type="checkbox"/> ~1.6MHz(011) <input type="checkbox"/> ~2MHz(100) <input type="checkbox"/> ~2.6MHz(101) <input type="checkbox"/> ~3.9MHz(110) <input type="checkbox"/> ~6.5MHz(111)
MO_CPP[0]	Port C Bit 0 Configuration	<input type="checkbox"/> Open-drain <input type="checkbox"/> Push-pull
MO_CPP[1]	Port C Bit 1 Configuration	<input type="checkbox"/> Open-drain <input type="checkbox"/> Push-pull
MO_CPP[2]	Port C Bit 2 Configuration	<input type="checkbox"/> Open-drain <input type="checkbox"/> Push-pull
MO_CPP[3]	Port C Bit 3 Configuration	<input type="checkbox"/> Open-drain <input type="checkbox"/> Push-pull
MO_CPP[4]	Port C Bit 4 Configuration	<input type="checkbox"/> Open-drain <input type="checkbox"/> Push-pull
MO_CPP[5]	Port C Bit 5 Configuration	<input type="checkbox"/> Open-drain <input type="checkbox"/> Push-pull
MO_CPP[6]	Port C Bit 6 Configuration	<input type="checkbox"/> Open-drain <input type="checkbox"/> Push-pull
MO_CPP[7]	Port C Bit 7 Configuration	<input type="checkbox"/> Open-drain <input type="checkbox"/> Push-pull
MO_DPP[0]	Port D Bit 0 Configuration	<input type="checkbox"/> Open-drain <input type="checkbox"/> Push-pull
MO_DPP[1]	Port D Bit 1 Configuration	<input type="checkbox"/> Open-drain <input type="checkbox"/> Push-pull
MO_DPP[2]	Port D Bit 2 Configuration	<input type="checkbox"/> Open-drain <input type="checkbox"/> Push-pull
MO_DPP[3]	Port D Bit 3 Configuration	<input type="checkbox"/> Open-drain <input type="checkbox"/> Push-pull
MO_DPP[4]	Port D Bit 4 Configuration	<input type="checkbox"/> Open-drain <input type="checkbox"/> Push-pull
MO_DPP[5]	Port D Bit 5 Configuration	<input type="checkbox"/> Open-drain <input type="checkbox"/> Push-pull
MO_DPP[6]	Port D Bit 6 Configuration	<input type="checkbox"/> Open-drain <input type="checkbox"/> Push-pull
MO_DPP[7]	Port D Bit 7 Configuration	<input type="checkbox"/> Open-drain <input type="checkbox"/> Push-pull
MO_10PP[0]	Port 10 Bit 0 Configuration	<input type="checkbox"/> Open-drain <input type="checkbox"/> Push-pull
MO_10PP[1]	Port 10 Bit 1 Configuration	<input type="checkbox"/> Open-drain <input type="checkbox"/> Push-pull
MO_10PP[2]	Port 10 Bit 2 Configuration	<input type="checkbox"/> Open-drain <input type="checkbox"/> Push-pull
MO_10PP[3]	Port 10 Bit 3 Configuration	<input type="checkbox"/> Open-drain <input type="checkbox"/> Push-pull
MO_10PP[4]	Port 10 Bit 4 Configuration	<input type="checkbox"/> Open-drain <input type="checkbox"/> Push-pull
MO_10PP[5]	Port 10 Bit 5 Configuration	<input type="checkbox"/> Open-drain <input type="checkbox"/> Push-pull
MO_10PP[6]	Port 10 Bit 6 Configuration	<input type="checkbox"/> Open-drain <input type="checkbox"/> Push-pull
MO_10PP[7]	Port 10 Bit 7 Configuration	<input type="checkbox"/> Open-drain <input type="checkbox"/> Push-pull

NOTE :

- For accessing any address large than 64KB, users must update TPP first, TPH then TPL. Only by this order, the pre-charge circuit of ROM will work correctly. 5us waiting is necessary before LDV instruction is executed since Data ROM is a low speed ROM. Users can not emulate this accessing process in ICE. So 5us delay should be added by firmware.

2. Please bonds the TSTP_P, RSTP_N and PRTD[7:0] with test point on PCB (can be soldered and probed) as you can, then KB can do some IC testing job on PCB. Neither VDD nor GND connection is necessary for TSTP_P. The following figure is an example (Testing point with through hole).



DEVICE USAGE CHECK: (for double check purpose only)

Clock Mode:	<input type="checkbox"/> Dual	<input type="checkbox"/> Fast	<input type="checkbox"/> Slow	<input type="checkbox"/> Idle	<input type="checkbox"/> Sleep
Reset Usage:	<input type="checkbox"/> External	<input type="checkbox"/> Internal			
Watch Dog Timer Usage:	<input type="checkbox"/> WDT				
I/O Usage:	_____Input, _____Output, _____Bi-directional				
RAM Usage:	Total_____Byte is used.(Max. 128 Byte SRAM)				
ROM Usage:	Total_____KB is used,_____KB is utilized as program ROM.				
Timer Usage:	<input type="checkbox"/> Timer I	<input type="checkbox"/> Timer II			
Speech Usage:	<input type="checkbox"/> PWM Output	<input type="checkbox"/> D/A Output			
OPAMP Usage:	<input type="checkbox"/> As Comparator	<input type="checkbox"/> As OPAMP			

APPROVED BY: ICE ROMLESS DEMOBOARD OTHER(_____)

COMMENTS :

<p>CUSTOMER APPROVAL BY:</p> <p>SIGNATURE: _____</p> <p>PRINTED NAME: _____</p> <p>TITLE: _____</p>		<p>K.B. CONFIRMATION BY:</p> <p>SIGNATURE: _____</p> <p>PRINTED NAME: _____</p> <p>TITLE: _____</p>
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