

Holtek Flash MCU In Circuit Programming

– ICP Application Circuit Design Guide

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ICP Writer Programming Interface Definitions

1. Using e-WriterPro

e-WriterPro supports ICP programming, user needs to...

- 1) Select “ICP” on “Select IC Package” window when downloading on HOPE3000.
- 2) Connect e-CON12A connector on e-Socket to the programming connector on Target board via e-Cable or jump by wires.

The following Table 1 describes the ICP definition of e-CON12A on e-Socket and the figure 1 shows the pin assignment of e-CON12A.

e-CON12A ICP pin assignment

Pin	Symbol	Description
1	VDD	VDD
2	-	Unused
3	ICPMS	Programming Mode Select Pin (RESB)
4	-	Unused
5	ICPCK	Programming Clock Pin
6	-	Unused
7	X	Unused (e-CON12A has no this Pin)
8	-	Unused
9	ICPDA	Programming Data Pin
10	-	Unused
11	VSS	Ground
12	-	Unused

Table 1

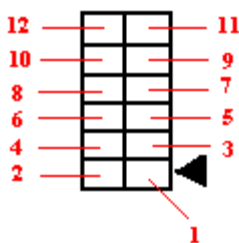


Figure 1

2. Using e-Writer plus / e-Writer

The Holtek Writer Programming pins are defined as shown in Fig.2.

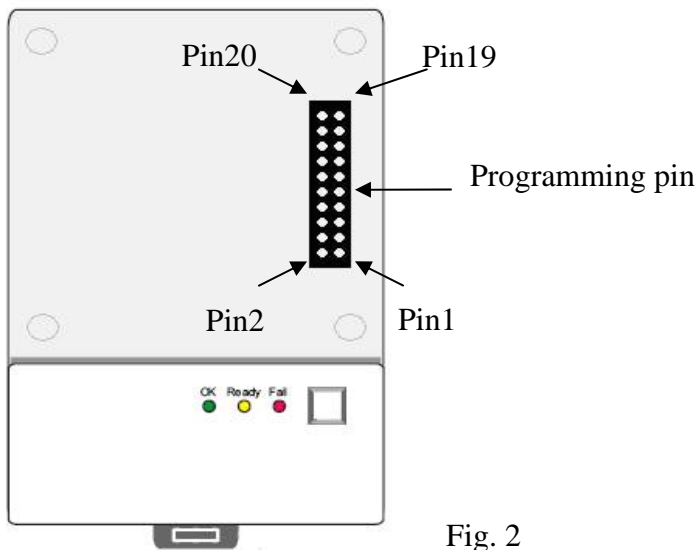


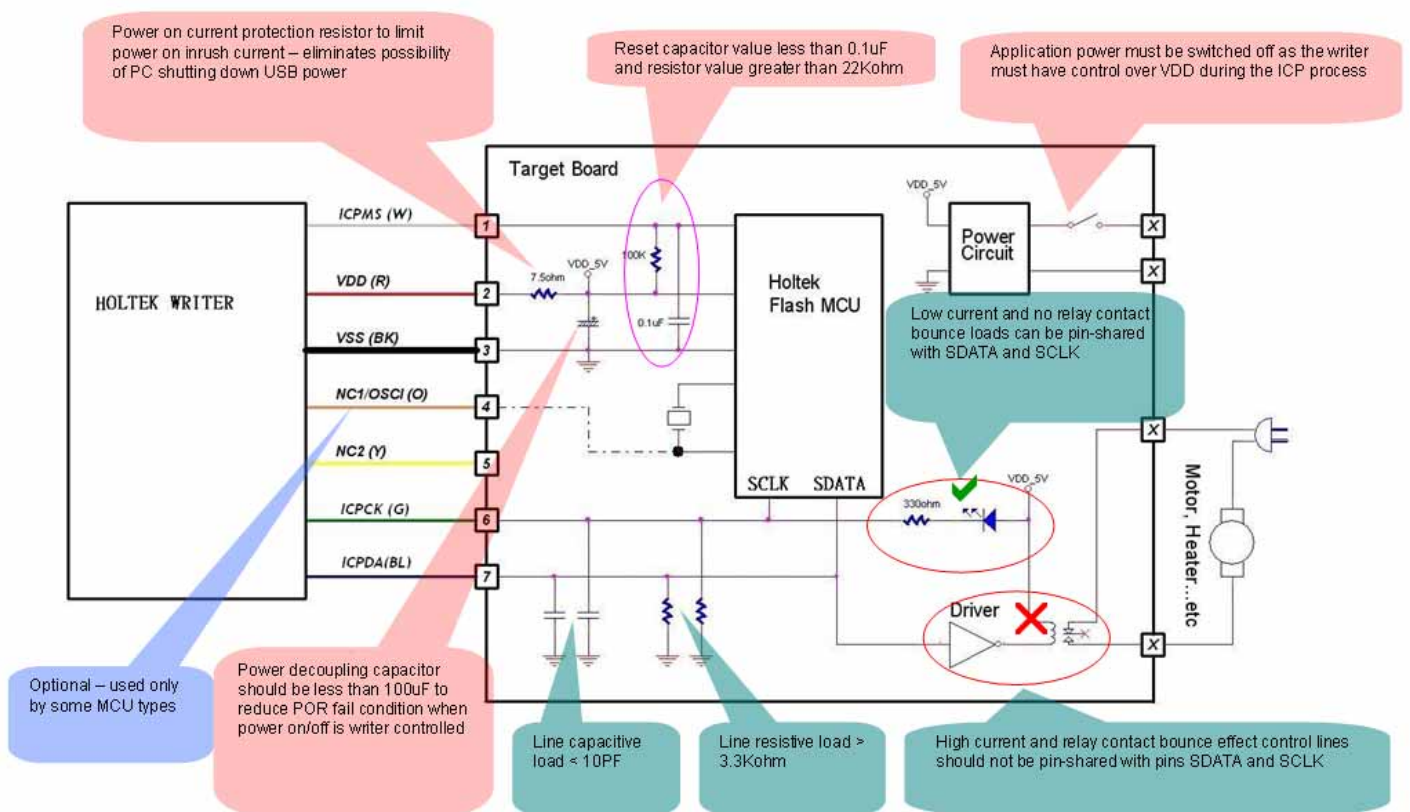
Fig. 2

The Holtek Flash MCU to Writer Programming Pin correspondence table is as follows:

Holtek Writer		HT46FxxE/ HT48FxxE	
Pin name	Pin number	Pin Name	Pin description
ICPDA	8	PA0	Serial Address and Data - read/write
ICPCK	10	PA4	Address and Data Serial Clock Input
ICPMS	20	/RES	Reset input
VDD	18	VDD	Power supply (5.0V)
VSS	16	VSS	Power ground

Holtek Writer		HT66Fxx/ HT68Fxx/ HT82Fxx/ HT83F02/HT83F22	
Pin name	Pin number	Pin Name	Pin description
ICPDA	6	PA0	Serial Address and Data – read/write
ICPCK	10	PA2	Address and Data Serial Clock Input
ICPMS	20	/RES	Reset input
VDD	18	VDD	Power supply (5.0V)
VSS	16	VSS	Power ground

ICP Programming Note



Note: if the e-writer is used for ICP programming following the above procedures, and is still ineffective, then it may be due excessively long lines or poor signal quality. The following steps can be tried to eliminate the problem:

1. Insert a 33~100 ohm resistor in the line between the Target Board and the Holtek Writer SDATA pin
2. Insert a 33~100 ohm resistor in the line between the Target Board and the Holtek Writer SCLK pin

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