

Semi-Automatic Writing Handler Improve Writing Stability

Applied for: All MCU

1. Preface

For all MCU (especially PMS150B), when using semi-automatic writing handler to write IC, the writing process may be affected by semi-automatic writing handler or other noise interference in the working environment, then the writing yield may fall, reference voltage may deviate (MCU with AD) and IHRC oscillation frequency becomes inaccurate, moreover the IC may burn down, this APN provides the improvement method to solve these problems.

2. Problem Description

PADAUK's writer can write IC and precisely calibrate related characteristics simultaneously, such as IHRC frequency. When using semi-automatic writing handler to write IC, the golden pins of handler should truly contact the IC pins. As a set of long bus wires are required to connect the golden pins of handler with the OTP writer, during the writing process, it may be interfered by external noise and result into the low yield. To improve the writing yield, we recommend the following connection ways.

- 3. The improvement tactics for low writing yield interfered by noise
- (1) Common ground :

The following ground should be wired together as command-ground: (1) The shield ground line of the writing bus wires (2) The ground of the writer (3) The semi-automatic writing handler slide.



Fig.1 : Semi-Automatic Writing Handler (Writer and all bus wires with same ground)





Fig. 2 : Semi-Automatic Writing Handler (Writer and all bus wires with same ground)



Fig. 3 : The outlet terminal of the writer for common ground





Fig. 4 : 5S-P003 writer GND



Fig. 5 : The outlet terminal of the writing bus wires and the shielded ground line





Fig. 6 : The common ground outlet terminal of the semi-automatic writer handler slide

(2) Update Writing Software :

IDE 0.68 or above versions must be used. Please update your software through the website of Padauk Technology at (<u>http://www.padauk.com.tw/index.aspx</u>).

If you have further questions to the application, please consult to our agent at your nearest location or contact us at <u>fae@padauk.com.tw</u>.