

FA-B series User's manual

FA-B series are the programming adapters for NEC Flash memory micro controllers. This line needs to be wired by customer. And support the following Flash programmers.

FL-PR5, FL-PR4 ----- Products of ASMIS

PG-FP5, PG-FP4, QB-MINI2 ----- Products of NEC Electronics

Also, the following adapter product is available.

FA-RX series Specialized adapter for the specific micro controllers (Wired already)

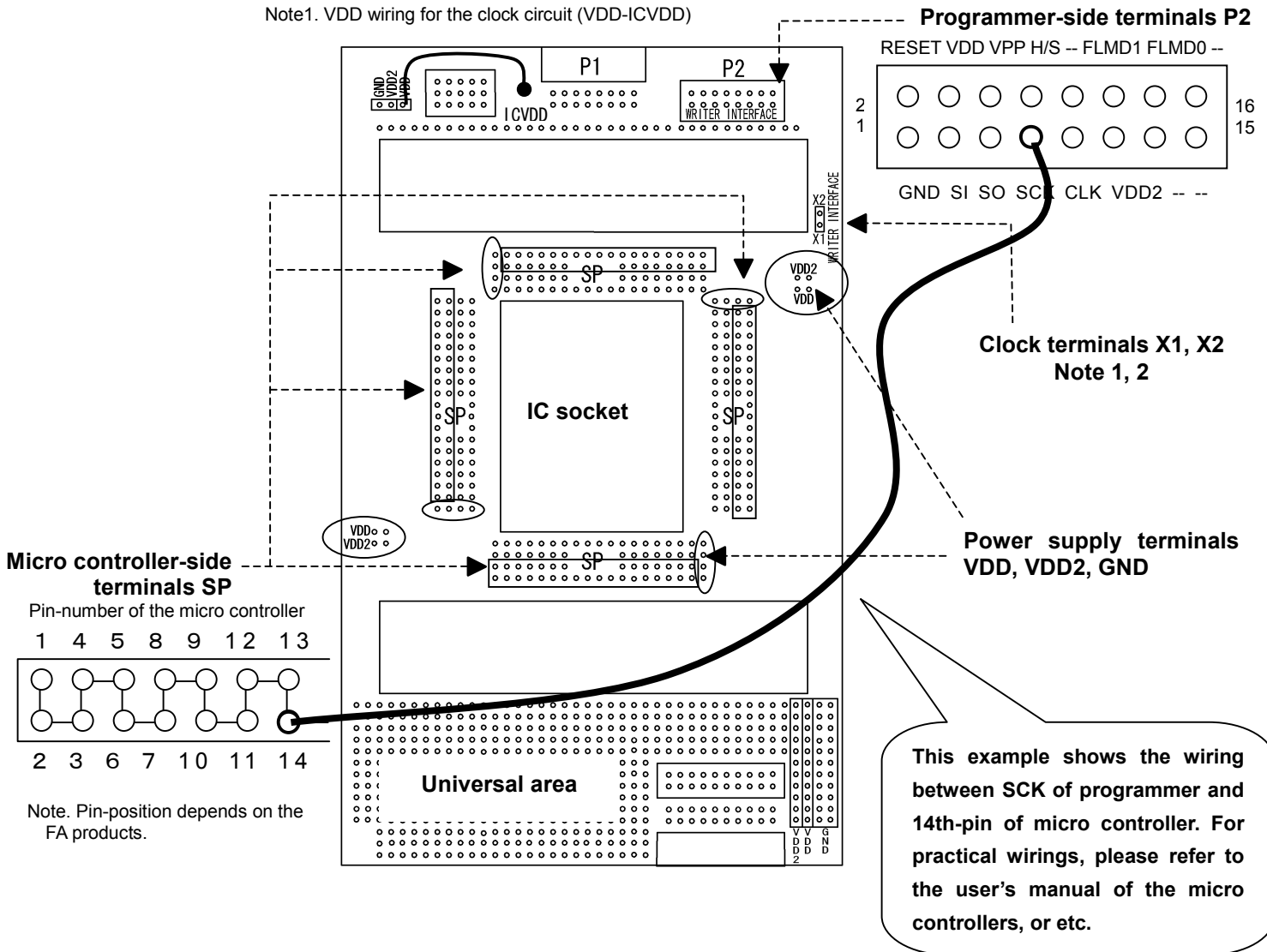
Procedure

1. For programming, please wire the required wiring at first.

Wire the required signals of programmer-side terminals P2 (SI, SO, SCK, X1, X2, /RESET, VPP, H/S, FLMD0, FLMD1), clock terminals (X1, X2), power supply terminals (VDD, VDD2, GND) and micro-controller-side terminals SP (the periphery of the IC socket). Please wire by using PVC wire by means of soldering.

For wiring, please follow the wiring specifications such as the user's manual of the micro controller, etc.

Note1. VDD wiring for the clock circuit (VDD-ICVDD)

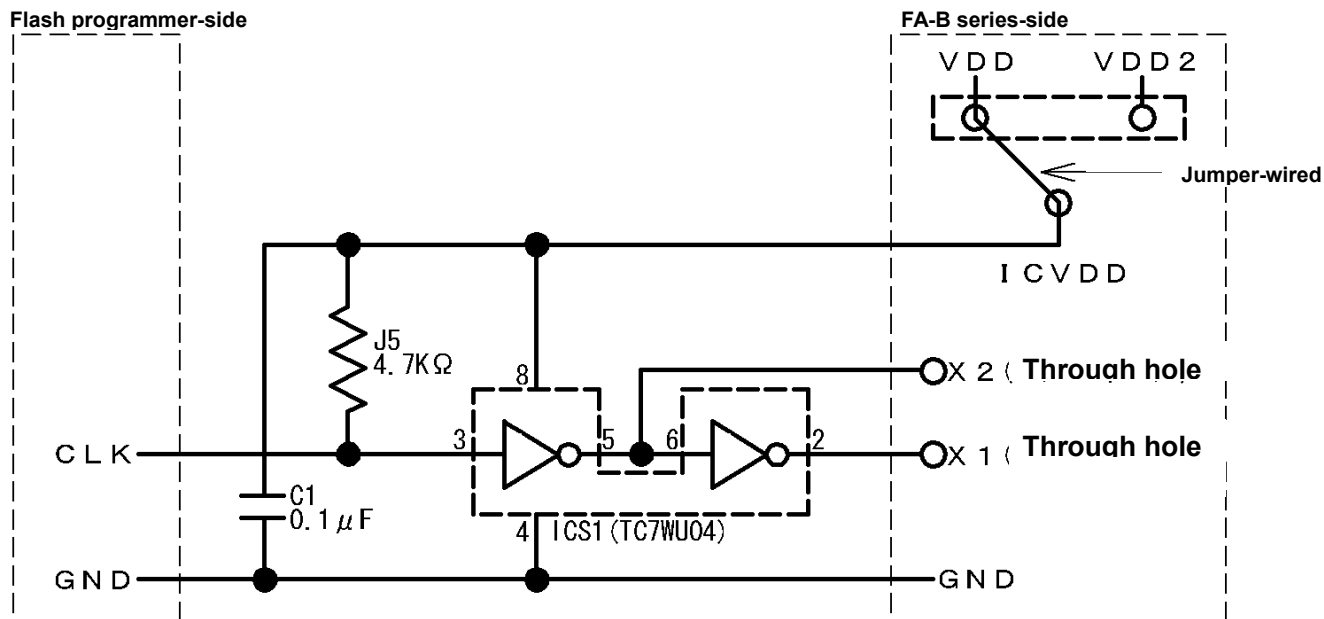


[Notes]

Note 1. For FA-B series board, the following clock circuit is mounted. If the reversed X1, X2 signals are required, these X1, X2 terminals should be wired. (TC7WU04 is put to use, which is equal in quality to 74HCU04.)

Power supply (ICVDD) of IC (TC7WU04) is jumper-wired to VDD. Please change this wiring in case of necessity.

Clock circuit for X1, X2 generation



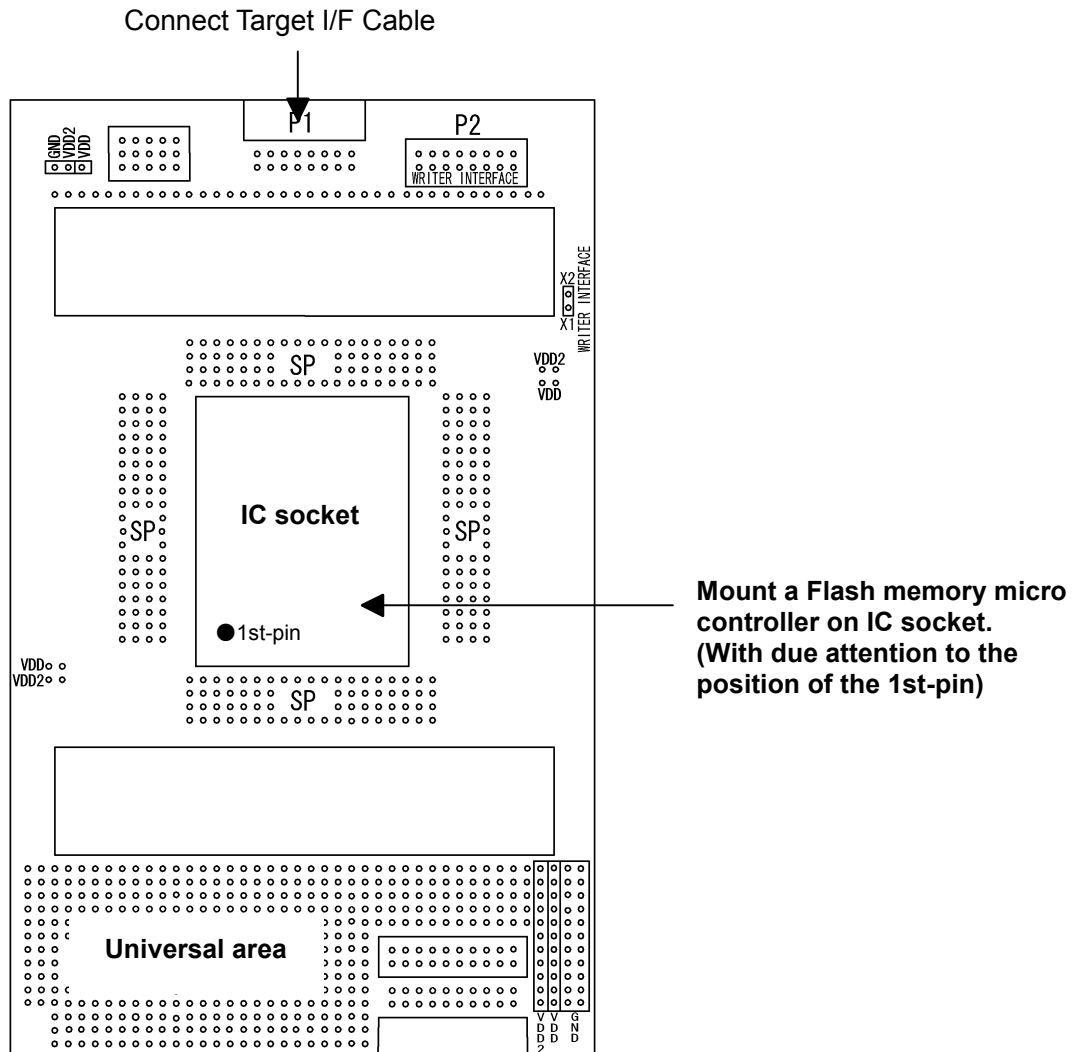
Note 2. If the specification of the micro controller requires the mounting of the oscillator or capacitor and the use of the buffer IC other than 74HCU04, create the required circuit on the universal area.

Note 3. If I/F signal level conversion is required, create the required circuit on the universal area.

Note 4. For termination of the unassigned terminals, please follow the specification of the micro controller (such as the user's manual, etc.).

2. Connect and run the programmer.

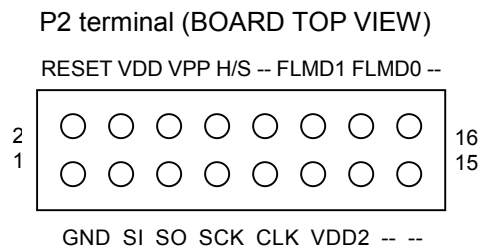
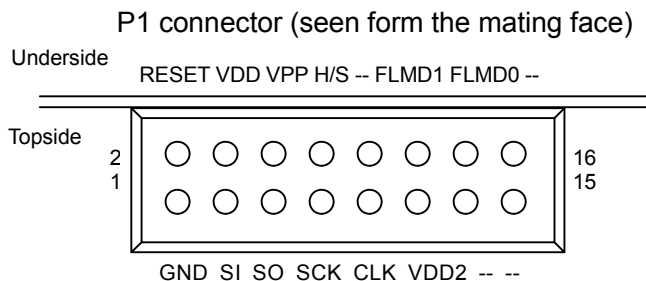
- Connect Target I/F Cable of the Flash programmer to P1 connector.



3. Connector Signal Table

The following table shows the signal names of P1 connector (for the programmer connecting) and P2 terminal (for wiring).

P1 connector	P2 terminal	Signal name
1	1	GND
2	2	/RESET
3	3	SI
4	4	VDD
5	5	SO
6	6	VPP
7	7	SCK
8	8	H/S
9	9	CLK
10	10	*(VDE)
11	11	VDD2
12	12	FLMD1
13	13	*(RFU-1)
14	14	FLMD0
15	15	*(Not used)
16	16	*(Not used)



Columns marked with * are defined as the unassigned terminal for user. They should be basically opened.

For further information about FA-B series adapter board, Please refer to ASMIS Homepage.

<http://www.ndk-m.co.jp/asmis/>