
RCSL No: 52-AA1097
Edition: March, 1982
Author: Villy Hansen

Title:

FPA803 MAINTENANCE PROCEDURES
Skew Compensation

Keywords:

RC8401, RC8000, Peripheral device, FPA803 Maintenance Procedures.

Abstract:

This paper describes how to skew compensate FPA803 front-end processor adapter.

(8 printed pages).

Copyright © 1982, A/S Regnecentralen af 1979
RC Computer A/S

Printed by A/S Regnecentralen af 1979, Copenhagen

Users of this manual are cautioned that the specifications contained herein are subject to change by RC at any time without prior notice. RC is not responsible for typographical or arithmetic errors which may appear in this manual and shall not be responsible for any damages caused by reliance on any of the materials presented.

CONTENTS

PAGE

1. MAINTENANCE PROCEDURES 1

1. MAINTENANCE PROCEDURES

Skew Compensation.

Two potentiometers (P1 and P2) are used to compensate for driver/receiver skew, cable skew and logic delays when data or address is received from RC8000 bus. The potentiometers are located beside positions 146 and 156 together with wrap-pin testpoints used for the adjustments of the delays. See fig. 1.1.

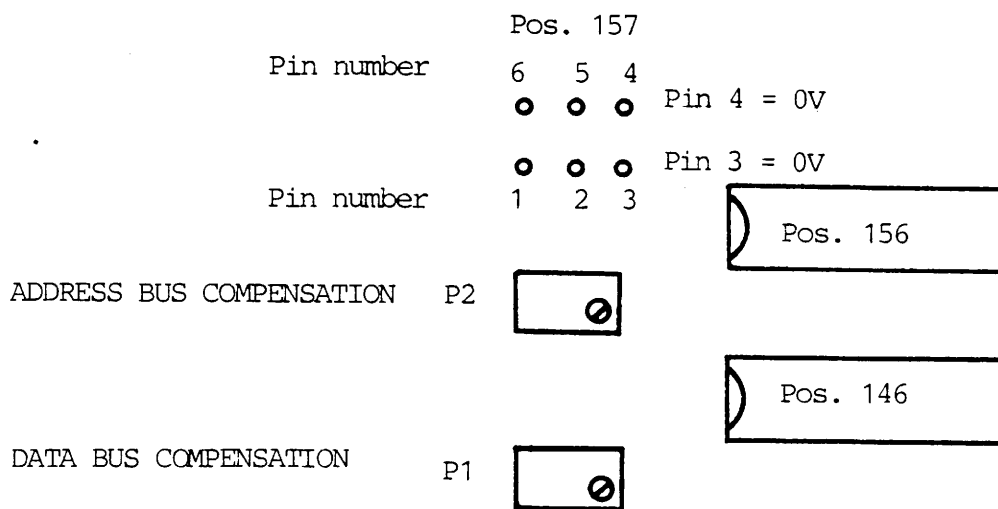


Fig. 1.1

DATA BUS COMPENSATION is used when data is received from the RC8000 bus. The compensation delay must be adjusted to approx. 120 nS. Data bus compensation delay is adjusted as follows (refer to diagram 23 in TECHNICAL MANUAL and fig. 1.2):

1. Set oscilloscope to trigger on the rising edge of the delay for ACK IN on wrap-pin pos. 157-pin 1.
2. Observe the falling edge of $\bar{}$, (MASTER * DEL ACK * DATA IN) pos. 157-pin 6, and adjust the potentiometer until a delay of 120 nS. is obtained.

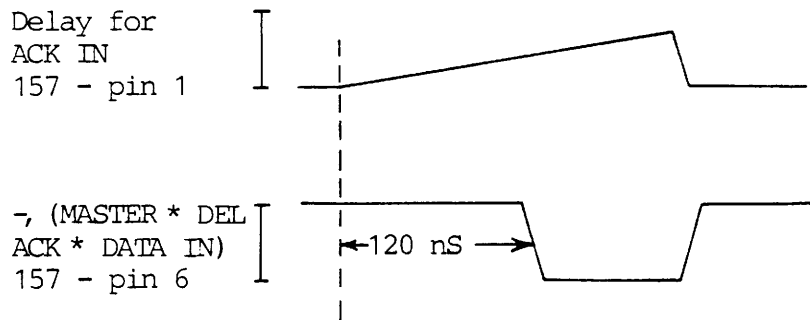


Fig. 1.2

ADDRESS BUS COMPENSATION is used when FPA803 is addressed from the RC8000 address bus (start channel program and Reset Unit). The compensation delay must be adjusted to approx. 150 nS.

Address bus compensation delay is adjusted as follows (refer to diagram 24 in TECHNICAL MANUAL and fig. 1.3):

1. Set oscilloscope to trigger on the rising edge of the delay for DATA READY IN on wrap-pin pos. 157-2.
2. Observe the falling edge of pos. 157-5, and adjust the potentiometer until a delay of 150 nS. is obtained.

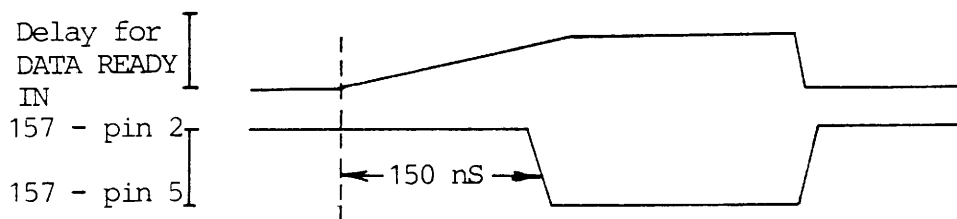


Fig. 1.3

RETURN LETTER

Title: FPA803 Maintenance Procedures,
Skew Compensation

RCSI. No.: 52-AA1097

A/S Regnecentralen af 1979/RC Computer A/S maintains a continual effort to improve the quality and usefulness of its publications. To do this effectively we need user feedback, your critical evaluation of this manual.

Please comment on this manual's completeness, accuracy, organization, usability, and readability:

Do you find errors in this manual? If so, specify by page.

How can this manual be improved?

Other comments?

Name: _____ Title: _____

Company: _____

Address: _____

Date: _____

Thank you

..... Fold here

..... Do not tear - Fold here and staple

Affix
postage
here

 **REGNECENTRALEN**
af 1979

Information Department
Lautrupbjerg 1
DK-2750 Ballerup
Denmark