PROM Replacement

System Firmware Upgrade – PC109x

A Member of the Kaba Group

KEYSCAN ACCESS CONTROL SYSTEMS FROM KEYSCAN INC

ACU/ECU System PROM Replacement

The enclosed ACU-ECU System EPROM chip upgrades Keyscan PC109x control boards for compatibility/features with a Keyscan software application.

Revised Serial Number Format/Software Enrollment

EPROM serial numbers on CA and EC control boards with firmware 9.20 or higher have 3 alpha characters followed by 4 numeric characters – example AAC1234. Please note the following conventions for enrollment on Keyscan software:

- Aurora – enter all seven characters of the serial number - above example entered as AAC1234
- System VII – enter the last alpha and four numeric characters – above example entered as C1234
- Vantage - enter the last alpha and four numeric characters – above example entered as C1234

EPROM Location and Replacement Procedures

Follow the steps outlined on page 3 to install a System Upgrade PROM.

Figure 1 and Figure 2 show the location of the System PROM chip with the protective cover removed.

Figure 1 - Location of the System EPROM on PC1091 - PC1095 Control Boards

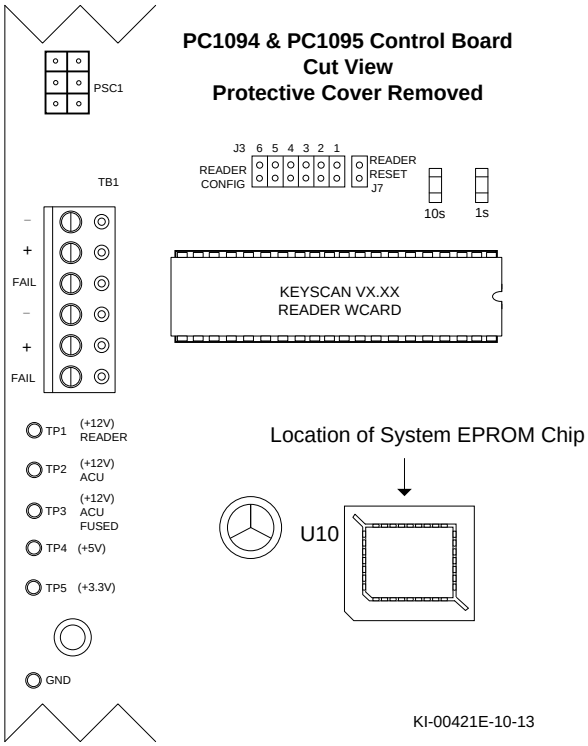
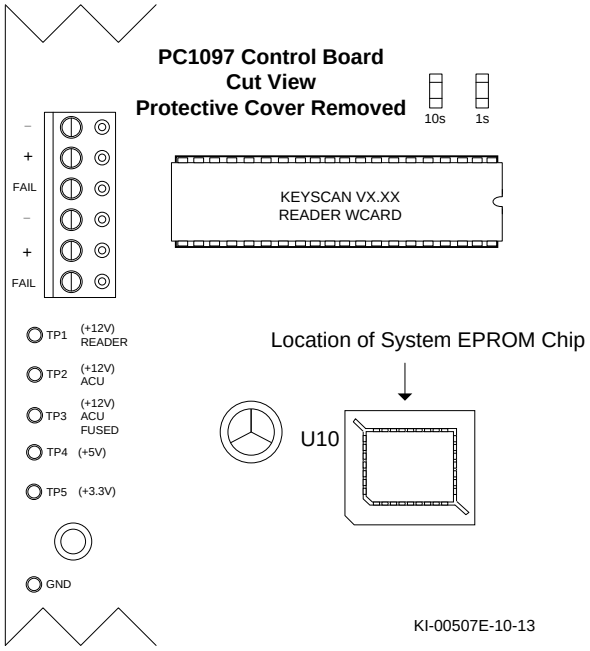


Figure 2 - Location of the System EPROM on PC1097 or higher Control Boards



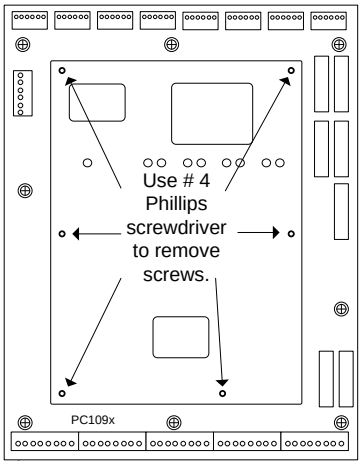
Tools

Before you start, you should have the following tools on hand:

- Extractor – a PLCC extractor is included with the replacement System Upgrade EPROM
- # 4 Phillips screwdriver

Steps to Replace the System EPROM Chip

1. Open the access control unit enclosure door.
2. Touch the earth ground lug in the ACU metal enclosure to discharge body static.
3. Power down the CA or EC control board.
4. Using a # 4 Phillips screwdriver, unfasten the six screws holding the control board's black protective cover.



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5. Locate the System EPROM chip at U10 on the control board.
    - Note the System EPROM's socket has two slots positioned at 11 o'clock and 5 o'clock.
6. Carefully insert the two ends of the PLCC extractor into the slots, positioned at 11 o'clock and 5 o'clock, of the System EPROM's socket.
7. Gently pinch the PLCC extractor until the prongs grip the chip.
8. Gently lift the System EPROM chip out of the socket.
9. Ensure the pins align with the socket and insert the new System Upgrade EPROM at the U10 position on the control board.
10. Re-attach the black protective cover to the control board.
11. If you are setting the control board for a different Keyscan software application, set the software selection jumpers or DIP switches:
    - PC1091 - PC1095 – Aurora : J17A = ON / J17B = ON
    - PC1094 – PC1095 – System VII : J17A = OFF / J17B = OFF
    - PC1091 – PC1095 – Vantage : J17A = ON / J17B = OFF
    - PC1097 or higher – Aurora : S2.11 = ON / S2.12 = ON
    - PC1097 or higher – System VII : S2.11 = OFF / S2.12 = OFF
    - PC1097 or higher – Vantage : S2.11 = ON / S2.12 = OFF
12. Apply power to the control board.
13. Perform a Clear Memory (Reset Factory Defaults) on the control board as outlined depending on the version:
    - PC1091 - PC1095 control boards - On the control board, place a jumper on J16 – pin H. Momentarily short jumper J1. This may take over two minutes while the control board loads the factory default settings. During the clear memory procedure, the System Status LED flashes red and the control board's piezo emits a cycle of two short beeps followed by a pause. Do not make any changes to the control board during the clear memory procedure. Then remove the jumper from J16 – pin H.

- PC1097 or higher control boards – on the control board, press S1, wait 5 seconds. Press S3 within 10 seconds. This process may take over two minutes while the control board loads the factory default settings. During the clear memory procedure, the system status LED flashes red and the control board's piezo emits a cycle of two short beeps followed by a pause. Do not make changes to the control board during the clear memory procedure.

14. If you have additional access control units which also require System Upgrade EPROMs, repeat the preceding steps for each applicable control board.
15. When you have finished changing EPROMs and clearing memory on those control boards, return to a PC/server with a Keyscan Client module, log in and perform an upload.
    - Aurora : Status button > Status > Access Control Unit Status > Select Site > under the Upload column select Full Upload – repeat for each control unit that had an EPROM upgrade
    - System VII or Vantage : Quick Buttons menu > Selective Update > select Site > under Unit Selection either select the control unit or All Units whichever is applicable > click on Select All button > click on Upload button – repeat for each control unit that had an EPROM upgrade if you did not select All Units and have to upload multiple control units