

Converting from 93LC56/56B/66/66B Devices to 93LC56A/56B/66A/66B Devices

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DESCRIPTION

This application note details the process of converting from 93LC56, 93LC56B, 93LC66, and 93LC66B type devices to Microchip's new 93LC56A, 93LC56B, 93LC66A, and 93LC66B devices. The new devices offer improved data polling, lower standby current, lower operating current and are available in a small 8-pin TSSOP package. The new devices also offer fixed device organization. For example, the "A" suffix on the 93LC56A indicates that the device is organized as x8 only. The "B" suffix indicates that the 93LC56B is organized as x16 only.

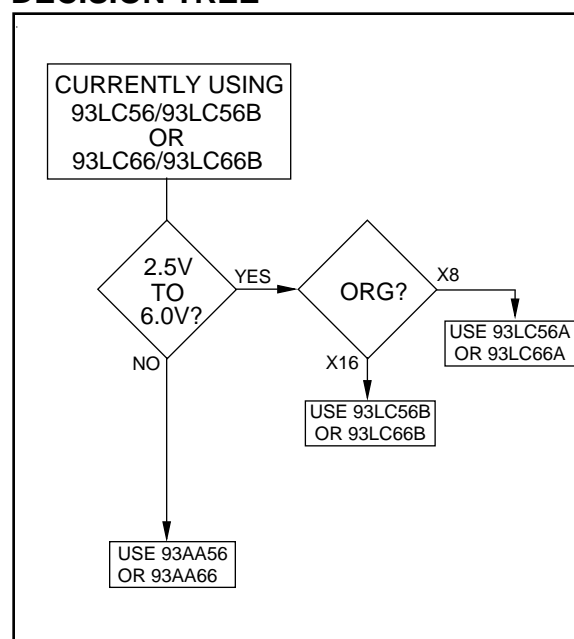
The new devices also incorporate power protection circuitry that adds extra data protection when powering the device up and down. The 93LCxxA/B devices are designed to function as 2.5V-6.0V parts. The internal voltage-detect circuit inhibits writes at < 2.2V nominally.

The operational parameters of the old and new devices are outlined below.

| Part Number | Organization | Operating Range |
|--------------------|--------------|-----------------|
| 93LC56 | x8 or x16 | 2.0V-6.0V |
| 93LC56B | x16 only | 2.0V-6.0V |
| 93LC66 | x8 or x16 | 2.0V-6.0V |
| 93LC66B | x16 only | 2.0V-6.0V |
| 93AA56 | x8 or x16 | 1.8V-6.0V |
| 93AA66 | x8 or x16 | 1.8V-6.0V |
| 93LC56A NEW | x8 only | 2.5V-6.0V |
| 93LC56B NEW | x16 only | 2.5V-6.0V |
| 93LC66A NEW | x8 only | 2.5V-6.0V |
| 93LC66B NEW | x16 only | 2.5V-6.0V |

The following product conversion decision tree will assist in converting from the old to the new devices. In order to properly convert to new products two items need to be known about the application; the operating voltage of the system and whether the memory is organized as x8 or x16.

PRODUCT CONVERSION DECISION TREE



Note the following details of the code protection feature on PICmicro® MCUs.

- The PICmicro family meets the specifications contained in the Microchip Data Sheet.
- Microchip believes that its family of PICmicro microcontrollers is one of the most secure products of its kind on the market today, when used in the intended manner and under normal conditions.
- There are dishonest and possibly illegal methods used to breach the code protection feature. All of these methods, to our knowledge, require using the PICmicro microcontroller in a manner outside the operating specifications contained in the data sheet. The person doing so may be engaged in theft of intellectual property.
- Microchip is willing to work with the customer who is concerned about the integrity of their code.
- Neither Microchip nor any other semiconductor manufacturer can guarantee the security of their code. Code protection does not mean that we are guaranteeing the product as “unbreakable”.
- Code protection is constantly evolving. We at Microchip are committed to continuously improving the code protection features of our product.

If you have any further questions about this matter, please contact the local sales office nearest to you.

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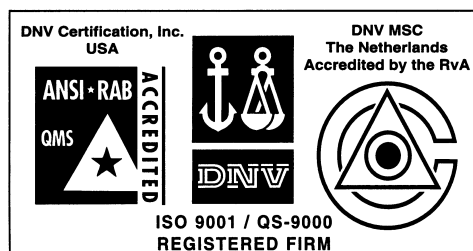
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