SMSC™
SUCCESS BY DESIGN

APPLICATION NOTE 9.11

Understanding the Chip ID and Revision Registers

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PRELIMINARY

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1 INTRODUCTION

Many of SMSC's products contain software addressable read-only Chip ID and Revision registers. The purpose of this document is to explain their importance, use, and when their values are changed from design to design.

2 CHIP ID REGISTER

This register will have a unique ID value for each device WITHIN a family of devices. For example, each LAN device type will have unique value that differs from every other LAN device. However, LAN devices and Super IO devices may have the SAME Chip ID.

The Chip ID can therefore be used by application software to identify the device type.

This register is provided ONLY to facilitate development of application software by SMSC or the end user. It has no other purpose in identifying the device for lot tracking or QA purposes, either by SMSC or customers.

Note: Not all SMSC devices have this register.

3 CHIP REVISION REGISTER

In general, this register will have a unique value for each FUNCTIONAL revision of a given device that has a SOFTWARE impact. This allows updated drivers or other software to operate with previous revisions of the device while providing updated operation with the later revisions, using the same driver software. It is customary to change this value between functional revisions of the device, but if the software is not impacted by the change, ie an output driver is altered, test mode changed, hardware implementation improved, but programming interface is unaffected, etc., then the value may remain UNCHANGED from the previous device revision.

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