**Application Note** 

**NXP Semiconductors** by:

## 1 Introduction

The Cryptographic Services Engine2 (CSE2) is a peripheral module that implements the security functions described in the Secure Hardware Extension (SHE) Functional Specification Version 1.1. The CSE2 design includes a host interface with a set of memory mapped registers that are used by the CPU to

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issue commands and a system bus interface that allows the CSE2 to directly access system memory. This application note lists the NXP chips that implements the latest version of CSE2 with Crypto library.

## 2 CSE2 chips

The following table lists the chips with the latest CSE2 firmware.

Table 1. CSE2 chips

| Chip name | Previous firmware | New firmware |
|-----------|-------------------|--------------|
| MPC5777C  | 2.07              | 2.08         |
| MPC5775E  |                   |              |
| MPC5775B  |                   |              |
| S32R27    | 2.07              | 2.08         |
| SAC57D54H | 2.07              | 2.08         |
| S32R37    | -                 | 2.08         |

## 3 Cryptographic algorithm validation program

The following table list the validation number for the firmware 2.08. For more information refer to the following link.

| Validation | Capabilities | Firmware validated | Earlier Firmware with identical source code |
|------------|--------------|--------------------|---|
| C1445      | AES-CBC      | 2.08               | 2.07  |
|            | AES-ECB      |                    |   |



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