



**Advanced Card Systems Ltd.**  
Card & Reader Technologies

# ACR38 CCID Smart Card Reader



Application Note: FW1.12c Change Log



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## 1.0. Introduction

This document will describe all the new changes made to this 1.12C firmware from the old 1.10 firmware. These changes only affect commands for the SLE memory cards.

The new ACR38 firmware 1.12C is backward compatible with the old ACR38 1.10 with minor changes only to the memory card functionalities of the reader.

## 1.1. Changes from Previous Firmware

1. The command **Select Card Type** for memory cards must be performed before any other command.
2. There are new reader commands for SLE 44x8, SLE 55x8, SLE 44x2 and SLE 55x2.
3. The commands that were updated for SLE memory cards are:
  - read error counter
  - read
  - read with protect

## 1.2. New Commands for the SLE Memory Cards

### 1.2.1. SLE 4418/4428/5528/5528

Command	Old Firmware (FW 1.10)	New Firmware (FW 1.12c)
Read with Protect	FF B2 MSB LSB MEM_L	FF <b>B0</b> MSB LSB MEM_L
Read without Protect	FF B0 MSB LSB MEM_L	FF <b>B2</b> MSB LSB MEM_L
Read Error Counter	FF B1 00 00 00	FF B1 00 00 <b>03</b>

### 1.2.2. SLE 4432/4442/5532/5542

Command	Old Firmware (FW 1.10)	New Firmware (FW 1.12c)
Read with Protect	FF B2 MSB LSB MEM_L	FF <b>B0</b> MSB LSB MEM_L
Read without Protect	FF B0 MSB LSB MEM_L	FF <b>B2</b> MSB LSB MEM_L
Read Error Counter	FF B1 00 00 00	FF B1 00 00 <b>04</b>

## 1.3. Steps to Properly Control Memory Cards

1. Always use select card type before executing any commands (for memory cards only)
2. Check the PCSC Memory Card Access Manual for the memory card commands that have been changed