

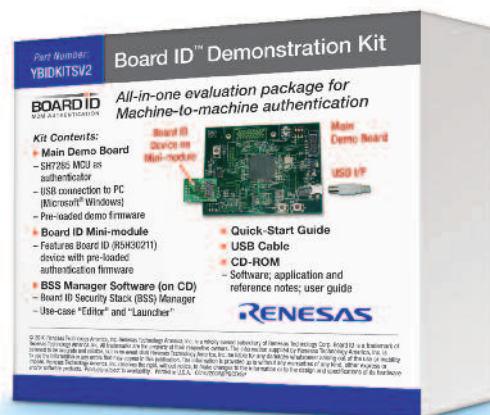
# Board ID™ Demonstration Kit

## A Powerful, Flexible Solution for Machine-to-Machine Authentication (M2M)

The Board ID Demonstration Kit enables you to evaluate the state-of-the-art Machine-to-Machine authentication capability of the Board ID device.

The pre-loaded Authentication Applet on the Board ID device handles all the complicated authentication steps so that there is no need to develop software for the Board ID device. The demonstration kit takes advantage of the applet and provides simple, yet powerful, authentication capabilities.

PC utility software included in the package provides guidance in setting up the authentication condition and launching actual authentication.



Part Number:  
YBIDKITSV2

### Highlights

- ▶ All-in-one evaluation package for Machine-to-Machine Authentication
- ▶ USB interface for easy connection to PC
- ▶ I2C interface for Board ID connectivity
- ▶ Serial interface for MCU to MCU connectivity
- ▶ Board ID Security Stack (BSS) firmware
- ▶ BSS Manager utility software on PC/Windows

### Demo Board

- ▶ SH7285 MCU as controller/authenticator
- ▶ USB connection in CDC (virtual COM) mode
- ▶ SCI (Serial Communication Interface)
- ▶ Socket for mini Board ID module
- ▶ Pre-loaded "BSS" firmware

### Mini Board ID Module

- ▶ Features Board ID device with pre-loaded "Authentication" applet supporting four use-cases: Anti-cloning, Usage Control, Secure Tracking and IP Protection
- ▶ Standard 10-pin headers

### BSS Manager Software

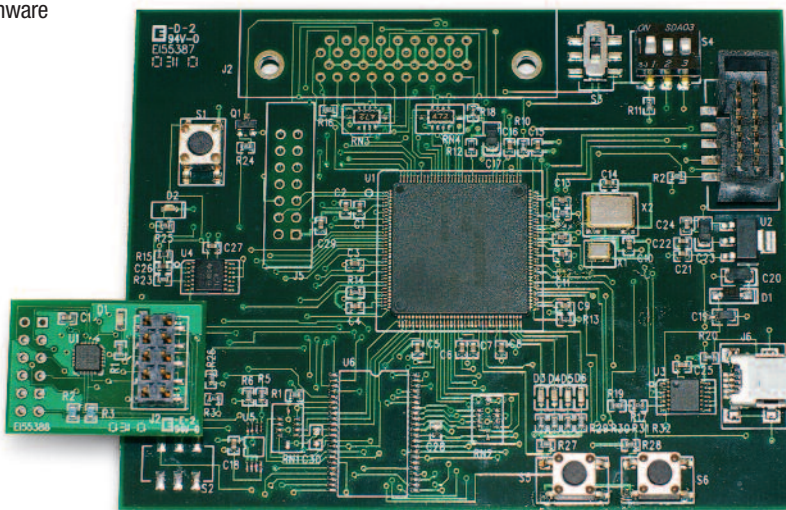
(see reverse side for example screens)

- ▶ Board ID Security Stack Manager
- ▶ Runs on Windows XP (SP2 or later)
- ▶ Features "Use-Case Editor" and "Use-Case Launcher" user interface

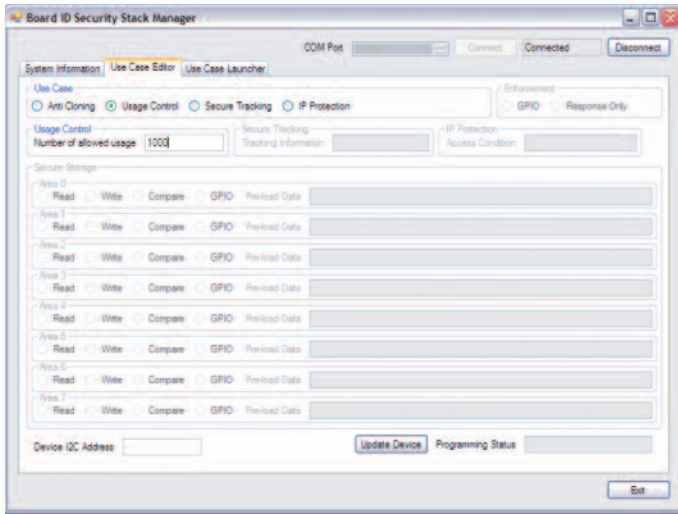
### Authentication Applet

The Authentication applet supports four use-cases:

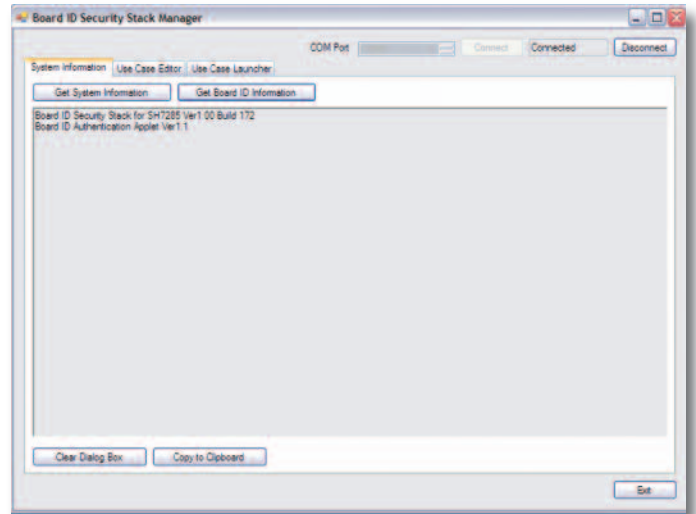
- ▶ **Anti-cloning** use-case protects your valuable product from cloning
- ▶ **Usage-control** use-case restricts the usage number so that you can manage the usage of a "medical probe" type of peripheral
- ▶ **Secure-tracking** use-case helps you control "regional" product pricing by preventing "unauthorized import" types of attacks
- ▶ **IP-protection** use-case protects your intellectual properties in your product from being hacked by privilege escalation and other known attacks



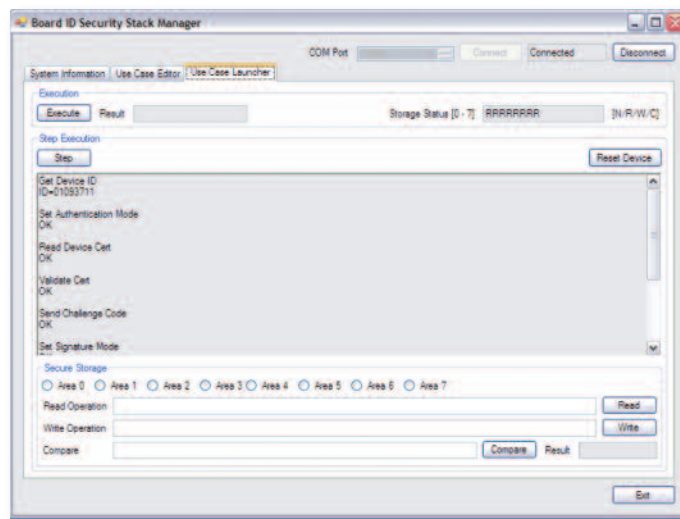
## BSS Manager



► BSS Manager utility software on PC/Windows®



► BSS Manager supports USB connection with virtual COM port. System Information Tab screen provides both MCU-BSS version and Board ID device information.



► Use-Case Launcher Tab screen allows you to execute actual authentication between the Board ID device and SH7285 MCU. Step execution lets you see individual authentication steps including digital certificate validation, and challenge and response processes.

For more information on the Board ID Solution, please visit [www.am.renesas.com/boardid](http://www.am.renesas.com/boardid)

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