Bay Trail CapsuleGen Tool User Guide

User Guide

March 2013

Revision 0.5

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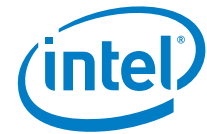This document contains information on products in the design phase of development.

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Revision History

Date	Revision	Description
March 2013	0.5	Initial release.

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The GenCapsule.exe tool is provided to create Capsule Firmware Volume by combining firmware update DXE with the firmware image to be updated. It also adds version information into the Capsule Firmware Volume consumed later by UpdateCapsule BIOS service.

The output of this tool is BIOSUpdate.fv. This output is later used by DFUDriverGen tool to generate the firmware update Windows* driver package. You can rename the output to follow your own naming convention before feeding the output to DFUDriverGen tool.

1.1   Installation

Installation of GenCapsule tool is straightforward. Copy the GenCapsule directory to the machine that this tool is to be run.

1.2   Run the Tool

The tool supports to be run in command mode only.

1.2.1   Command Mode

The tool runs in command mode if you specify any options as mentioned below:

1.2.1.1   Mandatory Command Options

-dxe <Path to DXE driver binary>
This option is mandatory. The dxe driver should already be UEFI signed for secure boot. This DXE driver is the update logic in the Capsule FV.

-cur <current version number>
This option is mandatory. The valid version number should be an unsigned 32-bit integer value. It specifies the version of firmware binary to be updated.

-min <minimum compatible firmware version number>
This option is mandatory. The valid minimum compatible firmware version number should be an unsigned 32-bit integer value. It specifies, after this new firmware is updated, what the lowest firmware version is that the system allows rolling back to. Normally this should be set equal to "cur" version number to avoid rollback of firmware.

-b <path of firmware binary file>
This option is mandatory. It specifies the firmware binary to be updated by the DXE in the Capsule FV.

1.2.1.1.1 Sample usage:

>GenCapsule.exe –cur 4 –min 4 –dxe FirmwareUpdate.efi –b firmawareImage.bin

1.2.1.2 Optional Command Options

-h
Optional and cannot combine with other options. This option provides tool help. Will provide prompt of usage when specified as the only option to the application.

1.2.1.2.1 Sample usage:

>GenCapsule.exe -h

1.2.1.2.2 Sample output:

The output of the tool is BIOSUPADATE.fv. You can rename it according to your firmware update naming convention.

1.2.2 UI Mode

This tool does not support to be run in UI mode.

1.3 Failure case

This tool does not support to be run in UI mode.