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# **i3070 Control XTP card firmware download and installation guide**

i3070 ICT system

1. Download the following firmware update zip files (XTPB\_SoC\_HPS\_Firmware.zip) from Keysight.com.
2. Unzip the file, which contains the following 4 files:

XTPB_SoC_HPS_Mux.img	SHA256SUM of XTPB_SoC_HPS_Mux_img
XTPB_SoC_HPS_UnMux.img	SHA256SUM of XTPB_SoC_HPS_UnMux_img

3. Depending on the system type Mux or UnMux, choose the first or second set of files. The following steps (4-6) is an example for Mux system, while the procedure is the same for UnMux system.
4. Open Windows Command Prompt and run command “certutil -hashfile PathOfFirmwareFile\XTPB\_SoC\_HPS\_Mux.img SHA256” to calculate the SHA-256 checksum.  
Example:

```
D:\ShareFolder\Temp>certutil -hashfile XTPB_SoC_HPS_Mux.img SHA256
SHA256 hash of XTPB SoC HPS Mux.img:
c38fd3e2fc80318a6b6cf0ef0066ca1bef140e51160fb8168c2c634cb8e7971d
CertUtil: -hashfile command completed successfully.
```

5. If step 4 doesn't work, open PowerShell and run command “Get-FileHash .\XTPB\_SoC\_HPS\_Mux.img -Algorithm SHA256” to calculate the SHA-256 checksum.  
Example:

```
PS D:\ShareFolder\Temp> Get-FileHash .\XTPB_SoC_HPS_Mux.img -Algorithm SHA256
Algorithm      Hash                                                    Path
-----
SHA256         C38FD3E2FC80318A6B6CF0EF0066CA1BEF140E51160FB8168C2C634CB8E7971D D:\ShareFolder\Temp\XTPB_SoC_...
```

6. Verify the result against the download “SHA256SUM” file, make sure they are exactly the same before proceeding to next step.  
Example:

```
SHA256 hash of XTPB_SoC_HPS_Mux.img:
c38fd3e2fc80318a6b6cf0ef0066ca1bef140e51160fb8168c2c634cb8e7971d
CertUtil: -hashfile command completed successfully.
```

7. Copy the respective XTPB\_SoC\_HPS\_Mux.img or XTPB\_SoC\_HPS\_UnMux.img file to "C:\I3070\_ICT\lib" folder in the i3070 system controller after renaming the original file there.
8. Launch DGN.
9. Select Configuration > Programmable Card Config.
10. Any available firmware updates will be highlighted.
11. Select "Update All" to begin the update.
12. Whenever the User Account Control dialog box appears, select "Yes" to allow the system to proceed.
13. When installation is completed, reboot the testhead.