

Tools Advisory: xFLASH does not complete

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1 Products affected

All versions of xTIMEcomposer up to and including 14.3.X

2 Issue

It is possible for xFLASH to appear to stall when programming an application to a xCORE device or generating a flash binary image. There is no progress output from xFLASH by default and no apparent failure message or crash report.

The problem lies with the compression algorithm used by xFLASH to compress the application supplied. Enabling the xFLASH option `--verbose` it can be observed that xFLASH is within the compression algorithm and progressing extremely slowly. This occurs when the application supplied to xFLASH contains a significant area of memory that contains the same repeated value. It has been reported that xFLASH can take more than 12 hours to complete.

3 Recommendation

If xFLASH appears to stall within the compression algorithm (verified by running xFLASH with `--verbose` enabled) then it is recommended that the xFLASH routine is ended using `CTL-C` and recalled with the xFLASH option `--no-compression` used. This will disable the compression algorithm and the resulting flash image will occupy approximately 20-25% more flash memory.

To enable the `--no-compression` flag in xTIMEcomposer

- ▶ From the xTIMEcomposer menu, select `Run->Flash Configurations...`
- ▶ Select your existing xFLASH configuration or create a new one if not already created.
- ▶ From within the xFLASH configuration select the xFLASH Options tab.
- ▶ In the `Other xFLASH Options` box at the bottom, enter `--no-compression`.
- ▶ Finally press the `Apply` button.

Alternatively you can use the command line tools and append `--no-compression` onto your existing xFLASH command you are using. For example:
`xflash my_application.xe --no-compression`



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