

Platina PSW-3001-32C BMC Software Upgrade Process

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Getting to the BMC

The BMC can be accessed via the front panel console port. By default, the console port is set to the x86 processor's console instead of the BMC's.

To switch to BMC console:

- At the x86 console Linux prompt, assuming GOES is running already, enter "goes toggle"
- The console has switched to BMC at this point. Hit return to see the BMC CLI prompt, which should look something like:
192.168.101.211>

To switch back to x86 console:

- At the BMC console prompt, enter "toggle"
- The console has switched to x86 at this point. Hit return to see the Linux prompt.

General Upgrade Process

The physical components involved in the BMC software upgrade are illustrated in Figure 1.

QSPI0:

Latest image
Single line command
upgrade via CLI

QSPI1:

Factory burned image
Used for recovery
Can be upgraded via uboot if necessary

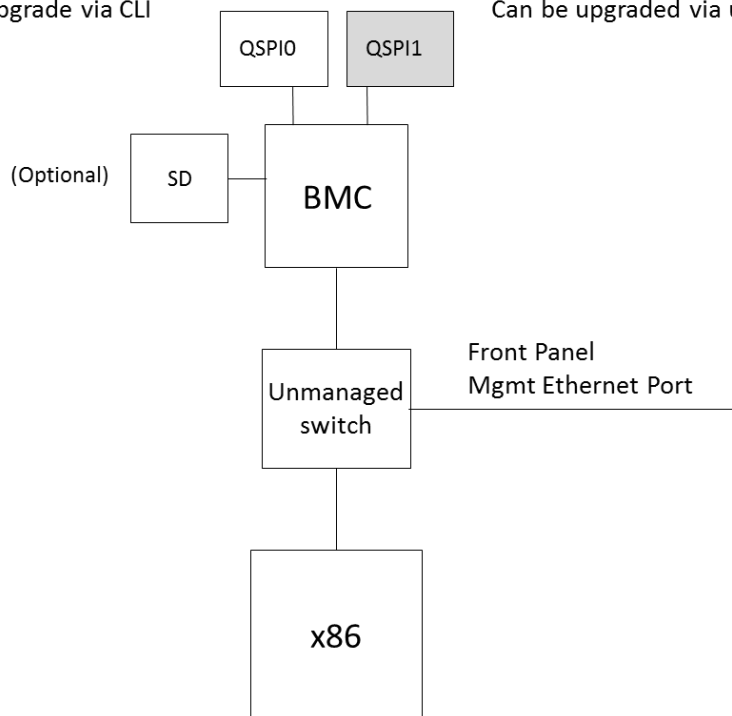


Figure 1. Block diagram of the components involved in BMC software upgrade

The image itself is stored in the QSPI flash, of which there are 2. QSPI1 has a default image installed at the factory and is not expected to be modified in the field, though it can be upgraded via uboot if necessary. QSPI0 stores the latest image and is always the location that BMC boots from first. The image at QSPI0 can be upgraded at any time via a single line command from the BMC command line interface (CLI). The upgrade command will automatically reboot the BMC to install the new image.

From BMC console CLI:

- Enter:

```
upgrade -v LATEST -s downloads.platinasystems.com
```

This will automatically go to <http://downloads.platinasystems.com/LATEST/> to wget the zip file **platina-mk1-bmc.zip**, install, and reboot the BMC to complete the upgrade. Reboot of BMC will not affect the x86.

'LATEST' can be replaced by any version control string (e.g. 'v0.2').

'downloads.platinasystems.com' can be replaced by any server http or IP address reachable via network that supports wget (e.g. 192.168.101.127).

Example: 'upgrade -v v0.2 -s 192.168.101.127' will go to 192.168.101.127/v0.2/ to wget the zip file **platina-mk1-bmc.zip**.

By default if the -s option is left out, upgrade command will go to <http://downloads.platinasystems.com/> to look for the files.

To see a list of software revisions available for upgrade on <http://downloads.platinasystems.com/>, enter 'upgrade -l':

Should anything happen during the upgrade process that results in a corrupted image that cannot be booted, a watchdog timer will time out and boot the BMC from QSPI1 instead. The timeout may take up to 2 minutes. Once booted from QSPI1, user can upgrade QSPI0 again via CLI.