WARNING: Possibly missing firmware for module during initrd generation

During initrd generation mkinitcpio might output the following messages:

```
==> Starting build: '6.2.8-arch1-1'
  -> Running build hook: [base]
  -> Running build hook: [systemd]
  -> Running build hook: [sd-plymouth]
  -> Running build hook: [keyboard]
==> WARNING: Possibly missing firmware for module: 'xhci_pci'
  -> Running build hook: [sd-vconsole]
  -> Running build hook: [modconf]
  -> Running build hook: [block]
==> WARNING: Possibly missing firmware for module: 'aic94xx'
==> WARNING: Possibly missing firmware for module: 'bfa'
==> WARNING: Possibly missing firmware for module: 'qed'
==> WARNING: Possibly missing firmware for module: 'qla1280'
==> WARNING: Possibly missing firmware for module: 'qla2xxx'
==> WARNING: Possibly missing firmware for module: 'wd719x'
  -> Running build hook: [sd-encrypt]
==> WARNING: Possibly missing firmware for module: 'qat_4xxx'
  -> Running build hook: [lvm2]
  -> Running build hook: [filesystems]
  -> Running build hook: [fsck]
```

These messages indicate that the firmware the mentioned kernel modules use are likely not installed, so the hardware these modules are intended for might not be functioning properly.

You can check which firmware files a module expects with `modinfo`:

```
modinfo xhci_pci
```

Which prints the following:

```
filename:       /lib/modules/6.2.8-arch1-1/kernel/drivers/usb/host/xhci-pci.ko.zst
license:        GPL
description:    xHCI PCI Host Controller Driver
firmware:       renesas_usb_fw.mem
srcversion:     2136F2C840FEFEEBE2620AB
alias:          pci:v*d*sv*sd*bc0Csc03i30*
alias:          pci:v00001912d00000015sv*sd*bc*sc*i*
alias:          pci:v00001912d00000014sv*sd*bc*sc*i*
depends:        xhci-pci-renesas
retpoline:      Y
intree:         Y
name:           xhci_pci
vermagic:       6.2.8-arch1-1 SMP preempt mod_unload
sig_id:         PKCS#7
signer:         Build time autogenerated kernel key
sig_key:        32:CA:80:C4:B5:BA:12:59:45:12:81:28:04:EF:9C:56:42:A8:A1:65
sig_hashalgo:   sha512
signature:      30:65:02:30:30:C2:EB:28:BB:C1:F4:09:1B:F8:94:7D:D6:6D:42:89:
□□□□2B:8C:74:4C:89:2C:F9:4F:6A:0C:92:64:B5:1C:97:76:15:DC:96:D6:
□□□□59:3B:6F:C9:E3:8F:89:16:2C:D9:36:AC:02:31:00:83:C4:FE:BF:75:
□□□□C5:8D:A7:82:01:08:79:3D:FF:8D:3C:54:41:95:6D:2C:5E:8B:C9:3B:
□□□□76:B0:1E:FE:5C:BA:23:66:30:A4:EA:D3:11:FF:7B:E4:93:67:DA:66:
□□□□02:16:6D
```

You can check to see whether the module gives any indication of whether intervention is required. If it lists hardware that is not present on the system, it can be safely ignored.

Getting rid of the warnings anyway

> **NOTE:** Also see the Arch Wiki article for `mkinitcpio` on the topic. At the time of writing, the firmware files for the `qat_4xxx` kernel module have not been made publicly available yet, so you will still receive a warning about this module in particular.

If you wish to not be warned about missing firmware files you can install the `mkinitcpio-firmware` meta package from the AUR:

```
yay -S mkinitcpio-firmware
```

This will install additional firmware files on your system to suppress these warnings.

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