1.) Install Compiler for building U-Boot on our Pine64 H64B SBC

sudo apt install device-tree-compiler build-essential libssl-dev python3-dev bison sudo apt install flex swig gcc-aarch64-linux-gnu gcc-arm-none-eabi sudo apt install gcc make git python3-setuptools

2.) Build U-Boot on our Pine64 H64B SBC

cd /home/youruser/
git clone https://github.com/ARM-software/arm-trusted-firmware
cd arm-trusted-firmware
git tag remember last stable (lts-v2.12.1)
git checkout lts-v2.12.1
make PLAT=sun50i_h6 bl31

cd..

git clone git://git.denx.de/u-boot.git
cd u-boot
git tag remember last stable (v2025.01)
git checkout v2025.01
ln -s /home/youruser/arm-trusted-firmware/build/sun50i_h6/release/bl31.bin bl31.bin
make BL31=bl31.bin pine_h64_defconfig
make -j2 BL31=bl31.bin

cd ..

cp -r /home/youruser/u-boot/u-boot-sunxi-with-spl.bin /home/youruser/

3.) Flashing U-Boot to our Pine64 H64B SBC

cd /home/youruser/

lsblk

remember storage device name

sudo dd if=u-boot-sunxi-with-spl.bin of=/dev/mmcblkX bs=1024 seek=8 conv=notrunc

4.) Reboot the machine

sudo reboot

Note: Ignore the warning below, the just build u-boot image is still functional and will work.

Image 'u-boot-sunxi-with-spl' has faked external blobs and is non-functional: scp.bin

Image 'u-boot-sunxi-with-spl' is missing optional external blobs but is still functional: scp

/binman/u-boot-sunxi-with-spl/fit/images/scp/scp (scp.bin):

SCP firmware is required for system suspend, but is otherwise optional.

Please read the section on SCP firmware in board/sunxi/README.sunxi64

Some images are invalid