Hi Carlos,
Nice to hear from you!
Here are the detailed setups:
1. Currently, Ubuntu 16.04 is installed on my Beaglebone Black, the image can be found here: https://rcn-ee.com/rootfs/2017-10-12/elinux/
The one I downloaded is ubuntu-16.04.3-console-armhf-2017-10-12.tar.xz
2. ROS Kinetic is currently installed, I installed the binary using apt-get.
http://wiki.ros.org/kinetic/Installation/Ubuntu, ROS-Base(Bare Bone) is installed.
3. I did a source compile for HARK(http://www.hark.jp/wiki.cgi?page=HARK+Installation+Instructions).
I did step 1 to 6, because the current plan is to use a playstation eye, whose transfer function is already provided by you. And according to FAQ, step 7 to 9 are not necessary if not going to generate customized transfer function.
I should say I had no problem compiling it. But something might go wrong.

For hark-ros-kinetic, I got the following error message at the first time compiling it:
`g++: error: unrecognized argument in option '-march=core2'
g++: note: valid arguments to '-march=' are: armv2 armv2a armv3 armv3m armv4 armv4t armv5 armv5e armv5t armv5te armv6 armv6-m armv6j armv6k armv6kz armv6s-m armv6t2 armv6z armv6zk armv7 armv7-a armv7-m armv7-r armv7e-m armv7ve armv8-a armv8-a+crc armv8.1-a armv8.1-a+crc iwmmxt iwmmxt2 native
g++: error: unrecognized argument in option '-mtune=core2'
g++: note: valid arguments to '-mtune=' are: arm1020e arm1020t arm1022e arm1026ej-s arm10e arm10tdmi arm1136j-s arm1136jf-s arm1156t2-s arm1156t2f-s arm1176jz-s arm1176jzf-s arm2 arm250 arm3 arm6 arm60 arm600 arm610 arm620 arm7 arm70 arm700 arm700i arm710 arm7100 arm710c arm710t arm720 arm720t arm740t arm7500 arm7500fe arm7d arm7di arm7dm arm7dmi arm7m arm7tdmi arm7tdmi-s arm8 arm810 arm9 arm920 arm920t arm922t arm926ej-s arm940t arm946e-s arm966e-s arm968e-s arm9e arm9tdmi cortex-a12 cortex-a15 cortex-a15.cortex-a7 cortex-a17 cortex-a17.cortex-a7 cortex-a32 cortex-a35 cortex-a5 cortex-a53 cortex-a57 cortex-a57.cortex-a53 cortex-a7 cortex-a72 cortex-a72.cortex-a53 cortex-a8 cortex-a9 cortex-m0 cortex-m0.small-multiply cortex-m0plus cortex-m0plus.small-multiply cortex-m1 cortex-m1.small-multiply cortex-m3 cortex-m4 cortex-m7 cortex-r4 cortex-r4f cortex-r5 cortex-r7 cortex-r8 ep9312 exynos-m1 fa526 fa606te fa626 fa626te fa726te fmp626 generic-armv7-a iwmmxt iwmmxt2 marvell-pj4 mpcore mpcorenovfp native qdf24xx strongarm strongarm110 strongarm1100 strongarm1110 xgene1 xscale
g++: error: unrecognized command line option '-mmmx'
g++: error: unrecognized command line option '-msse'
g++: error: unrecognized command line option '-msse2'
g++: error: unrecognized command line option '-msse3'
g++: error: unrecognized command line option '-mfpmath=sse'`

So I changed corresponding parameters in two Makefiles in the src folder in order to make it start compiling.
The compilation couldn't finished with the error message:
`[4587.888399] Out of memory: Kill process 9989 (cc1plus) score 868 or sacrifice child
[4587.926338] Killed process 9989 (cc1plus) total-vm:462796kB, anon-rss:444264kB, file-rss:8kB, shmem-rss:0kB`
So I am suspecting maybe cross-compile is a better option but not sure how to do that.

Thank you and looking forward to your reply.
Danbing