N7 BUILD SYSTEM for BP30

NeonSeven

Build System

Environment for BP30

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What we are going to do

- What you need

- Compiling

- Add/Remove Files from Compiling

- Compiling Defines

- Compiling Includes

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What you need

■ If buildtools VOB is not available

– Tasking C166 compiler v7.5 release 5
NOTE: the cp166l.lib library of v7.5r5 has a problem, a modified one will be used (it will be provided by N7).

– ActivePerl v5.6.1 (or subsequent)

■ Cygwin v2.05 (or subsequent)

■ Microsoft Visual C++ v7.0

■ ClearCase Environment

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■ The command line for compiling is: make –r.

This will start a build with settings stored in the project.cfg.default file: stored values are project specific.

■ Once the build process has completed, the executable file ${PROJECTNAME}.hex can be found in the folder system-build/${TARGETSYSTEM}/${PLATFORM}. Also the abs file ${PROJECTNAME}.abs and the map file ${PROJECTNAME}.map are present here

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- **USEFUL COMMANDS**
  - make –r PLATFORM=BP30_GLOBE6 to get a complete build for GLOBE6;

  - make –r TARGETSYSTEM=ALIHOST to get a complete build for host;

  - make –r BUILDMODE=DEBUG to get a build with debugging information;

  - make –r INT_STAGE=STT to get a build with only stack;

  - make –r -k   build doesn't stop if errors occur;

  - make –r ADD_SYSTEM_DEFS=RAINBOW_DISPLAY
    define "RAINBOW_DISPLAY" added to build

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Add/Remove Files

to/from Compiling

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You have to add/remove the files to/from makefile that you want include them to (which aleready includes them in) to the variable ${BUILD_LIB}_FILES, e.g.

**${BUILD_LIB}_FILES += **

> **<file1> **
>
> **<file2> **
>
> **<file3> **
>
> **<NewFile>**

Valid for every module (stack,drivers, Apoxi, RefMMI modules)

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Compiling Defines

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■ Different types:

- SYSTEM_DEFS, visible to every file;

- CC_DEFS, visible to .c files;

- CPP_DEFS, visible to .cpp files;

- ASM_DEFS, visible to .asm files;

■ You MUST choose the "right place" (makefile) where add/remove defines to/from according to the following rules.

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- Top level "makeoptions.mk" (path:system-build/make) for global defines;

- platform "makeoptions.mk" (EGOLDLITE) for BP30 platform specific defines;

- Cbe_apoxi_makeoptions.mk (path: lnz_apoxi/Apoxi) for APOXI_DEFS defines;

- Cbe_mmi_makeoptions.mk (path: lnz_mmi/Mmi) for REFMMI_DEFS defines;

- Cbe_mmi_plugins_makeoptions.mk (path: lnz_mmi/MmiPlugins) for MMIPLUGIN_DEFS defines;

- Cbe_app_makeoptions.mk (path: lnz_apps_int/Applications) for APP_DEFS defines;

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Compiling Includes

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- In order to add an include path to a module, path and compiler include path settings part in module makefile must be modificated. Follows an example:

If you want to include path "dwddrv/AUD/src" in some module, you have to add the following line to the include path part

${BUILD_LIB}_INC += \

    …………

    ${GLOBALPATH}/dwddrv/AUD/src \

    …………

    …………

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References:

- NeonSeven BP30 Build System Environment

- NeonSeven ClearCase Environment

- Comneon CBE Common Build Environment v1.3

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Thank you for your attention!