```
1: #-- set this to the man directory you would like to use
 2: MANPATH:=/usr/share/man
 3:
 4: #-- uncomment this to enable debugging
5: #DEBUG:=-g -DDEBUG
 6:
 7:
8: ##### YOU SHOULD NOT CHANGE BELOW THIS LINE #####
9:
10: SHELL:=/bin/bash
11: SRCS:=api.c
12: MANS:=man3/libxbee.3 \
13:
          man3/xbee_setup.3 \
14:
          man3/xbee_setuplog.3 \
15:
          man3/xbee_newcon.3 \
16:
          man3/xbee_flushcon.3 \
17:
          man3/xbee_endcon.3 \
18:
          man3/xbee_getpacket.3 \
19:
          man3/xbee senddata.3 \
20:
          man3/xbee_nsenddata.3 \
21:
          man3/xbee_vsenddata.3 \
22:
          man3/xbee_getdigital.3 \
23:
          man3/xbee_hasdigital.3 \
24:
          man3/xbee_getanalog.3 \
25:
          man3/xbee_hasanalog.3 \
26:
          man3/xbee_pkt.3
27: MANPATHS:=$(foreach dir,$(shell ls man -ln | grep ^d | tr -s ' ' | cut -d ' ' -f 9),${MANPATH}/$(dir))
28:
29: PDFS:=${SRCS} ${SRCS:.c=.h} makefile main.c xbee.h
30:
31: CC:=gcc
32: CFLAGS:=-Wall -Wstrict-prototypes -Wno-variadic-macros -pedantic -c -fPIC ${DEBUG}
33: CLINKS:=-lm ./lib/libxbee.so.1.0.1 -lpthread ${DEBUG}
34: DEFINES:=
35:
36: ifeq ($(strip $(wildcard ${MANPATH}/man3/libxbee.3.bz2)),)
37: FIRSTTIME:=TRUE
38: else
39: FIRSTTIME:=FALSE
40: endif
41:
42: ENSCRIPT:=-MA4 --color -f Courier8 -C --margins=15:15:0:20
43: ifneq ($(strip $(wildcard /usr/share/enscript/mine-web.hdr)),)
44:
    ENSCRIPT+= --fancy-header=mine-web
45: else
    ENSCRIPT+= --fancy-header=a2ps
46:
47: endif
48:
49: SRCS:=${sort ${SRCS}}
50: PDFS:=${sort ${PDFS}}
51:
52: .PHONY: FORCE
53: .PHONY: all run new clean cleanpdfs main pdfs
54: .PHONY: install install_su install_man
55: .PHONY: uninstall uninstall_su uninstall_man/
56:
57:
58: # all - do everything (default) #
59: all: main
            @echo "*** Done! ***"
60:
61:
62:
63: # run - remake main and then run #
64: run: main
65:
            LD_LIBRARY_PATH=./lib:$LD_LIBRARY_PATH ./bin/main
66:
67:
68: # new - clean and do everything again #
69: new: clean all
70:
71:
72: # clean - remove any compiled files and PDFs #
73: clean:
            rm -f ./*~
74:
75:
            rm -f ./sample/*~
            rm -f ./obj/*.o
rm -f ./lib/libxbee.so*
76:
77:
78:
            rm -f ./bin/main
79:
80: cleanpdfs:
           rm -f ./pdf/*.pdf
81:
82:
83:
84: # install - installs library #
85: install: ./lib/libxbee.so.1.0.1
```

```
@echo
87:
         @echo
88: ifneq ($(shell echo $$USER),root)
         89:
90:
         @echo "### To Install this library I need the root password please!"
         91:
92: endif
93:
         su -c "make install su --no-print-directory"
94:
         @echo
95: ifeq (${FIRSTTIME},TRUE)
         96:
97:
         @echo
98:
         @pr -h "" -o 3 -w 86 -tT ./README
99:
         @echo
100:
         101: endif
102:
103: install su: /usr/lib/libxbee.so.1.0.1 /usr/include/xbee.h install man
104:
105: /usr/lib/libxbee.so.1.0.1: ./lib/libxbee.so.1.0.1
106:
         cp ./lib/libxbee.so.1.0.1 /usr/lib/libxbee.so.1.0.1 -f
107:
         @chmod 755 /usr/lib/libxbee.so.1.0.1
108:
         @chown root:root /usr/lib/libxbee.so.1.0.1
109:
         cp /usr/lib/libxbee.so.1.0.1 /usr/lib/libxbee.so.1 -sf
110:
         @chown root:root /usr/lib/libxbee.so.1
111:
         cp /usr/lib/libxbee.so.1.0.1 /usr/lib/libxbee.so -sf
112:
         @chown root:root /usr/lib/libxbee.so
113:
114: /usr/include/xbee.h: ./xbee.h
         cp ./xbee.h /usr/include/xbee.h -f
115:
116:
         @chmod 644 /usr/include/xbee.h
117:
         @chown root:root /usr/include/xbee.h
118:
119: install_man: ${MANPATH} ${MANPATHS} ${addsuffix .bz2,${addprefix ${MANPATH}/,${MANS}}}
120:
121: ${MANPATH} ${MANPATHS}:
         122:
123:
         @echo "### $@ does not exist... cannot install man files here!"
124:
         @echo "### Please check the directory and the MANPATH variable in the makefile"
         125:
126:
         @false
127:
128: ${MANPATH}/%.bz2: ./man/%
129:
         @echo "cat $< | bzip2 -z > $@"
         @cat $< | bzip2 -z > $@ || ( \
130:
131:
          echo "### Installing man page '$*' to '$@' failed..."; \
132:
133:
           echo "################################;"; )
134:
         @chmod 644 $@
135:
         @chown root:root $@
136:
137: ./doc/:
138:
         mkdir ./doc/
139:
140: html: ./doc/ ./man/
141:
         rm -rdf ./doc/*
         cd ./doc/;mkdir `find ../man/ -type d -not -path *.svn* | cut -b 2-`
142:
143:
         find ./man/ -type f -not -path *.svn* | cut -d / -f 3- | sort > .html_todo
144:
         for item in 'cat .html_todo'; do man2html -r ./man/$$item | tail -n +3 > ./doc/man/$$item.html; done
145:
         rm .html todo
146:
147: uninstall:
148:
         @echo
149:
         @echo
150: ifneq ($(shell echo $$USER),root)
151:
         @echo "### To Uninstall this library I need the root password please!"
152:
153:
         154: endif
155:
         su -c "make uninstall_su --no-print-directory"
156:
         @echo
157:
         @echo
158:
159: uninstall_su: ${addprefix uninstall_man/,${MANS}}
160:
         rm /usr/lib/libxbee.so.1.0.1 -f
161:
         rm /usr/lib/libxbee.so.1 -f
162:
         rm /usr/lib/libxbee.so -f
163:
         rm /usr/include/xbee.h -f
164:
165: uninstall_man/%:
         rm ${MANPATH}/$*.bz2 -f
166:
167:
168: # main - compile & link objects #
169: main: ./bin/main
170:
```

```
171: ./bin/main: ./lib/libxbee.so.1.0.1 ./bin/ ./main.c
             ${CC} ${CLINKS} ./main.c -o ./bin/main ${DEBUG}
172:
173:
174: ./bin/:
175:
             mkdir ./bin/
176:
177: ./lib/libxbee.so.1.0.1: ./lib/ ./obj/ ${addprefix ./obj/,${SRCS:.c=.o}} ./xbee.h
            gcc -shared -Wl,-soname, libxbee.so.1 -o ./lib/libxbee.so.1.0.1 ./obj/*.o -lrt
178:
179: ifeq ($(strip $(wildcard ./lib/libxbee.so.1)),)
180:
            ln ./libxbee.so.1.0.1 ./lib/libxbee.so.1 -sf
181: endif
182: ifeq ($(strip $(wildcard ./lib/libxbee.so)),)
183:
             ln ./libxbee.so.1.0.1 ./lib/libxbee.so -sf
184: endif
185:
186: ./lib/:
187:
             mkdir ./lib/
188:
189: ./obj/:
190:
             mkdir ./obj/
191:
192: ./obj/%.o: %.c %.h xbee.h
193:
             ${CC} ${CFLAGS} ${DEFINES} ${DEBUG} $*.c -0 $@
194:
195: ./obj/%.o: %.c xbee.h
196:
            ${CC} ${CFLAGS} ${DEFINES} ${DEBUG} $*.c -o $@
197:
198:
199: # pdfs - generate PDFs for each source file #
200: ifneq ($(strip $(wildcard /usr/bin/ps2pdf)),)
201: ifneq ($(strip $(wildcard /usr/bin/enscript)),)
202: pdfs: ./pdf/ ${addprefix ./pdf/,${addsuffix .pdf,${PDFS}}}}
203:
204: ./pdf/:
205:
             mkdir ./pdf/
206:
207: ./pdf/makefile.pdf: ./makefile
208:
            enscript ${ENSCRIPT} -Emakefile $< -p - | ps2pdf - $@
209:
210: ./pdf/%.pdf: %
211:
             enscript ${ENSCRIPT} -Ec $< -p - | ps2pdf - $@
212:
213: ./pdf/%.pdf:
214:
             @echo "*** Cannot make $@ - '$*' does not exist ***"
215: else
216: pdfs:
217:
             @echo "WARNING: enscript is not installed - cannot generate PDF files"
218: endif
219: else
220: pdfs:
221:
             @echo "WARNING: ps2pdf is not installed - cannot generate PDF files"
222: endif
```