

开发环境搭建

安装TinyOS工具链

清理之前的安装

```
sudo dpkg -P `dpkg -l nesc '*tinyos*' | grep ^ii | awk '{ print $2 }' | xargs`  
sudo apt-get clean
```

添加tinyprod源

```
cd /etc/apt/sources.list.d  
sudo echo "deb http://tinyprod.net/repos/debian squeeze main" >> tinyprod-debian.list  
sudo echo "deb http://tinyprod.net/repos/debian msp430-46 main" >> tinyprod-debian.list
```

安装相应工具链

```
sudo apt-get update  
sudo apt-get install nesc tinyos-tools msp430-46 avr-tinyos
```

安装TinyOS

下载并解压

```
##进入用户目录  
cd ~  
##下载并解压  
wget http://github.com/tinyos/tinyos-release/archive/tinyos-2_1_2.tar.gz  
tar xF tinyos-2_1_2.tar.gz  
##将文件夹改名为tinyos-main  
mv tinyos-release-tinyos-2_1_2 tinyos-main  
cd tinyos-main  
##创建环境变量配置文件  
touch tinyos.env  
sudo chmod +x tinyos.env  
gedit tinyos.env
```

加入下列配置

```
export TOSROOT="/home/xxx/tinyos-main"  
##xxx为用户名  
export TOSDIR="$TOSROOT/tos"  
export CLASSPATH=$CLASSPATH:$TOSROOT/support/sdk/java
```

```
export MAKERULES="$TOSROOT/support/make/Makerules"  
export PYTHONPATH=$PYTHONPATH:$TOSROOT/support/sdk/python  
echo "setting up TinyOS on source path $TOSROOT"
```

将tinyos.env加入.bashrc

```
sudo gedit .bashrc
```

在最后一行加入 source /home/xxx/tinyos-main/tinyos.env 重启终端

```
echo $TOSROOT
```

查看是否为/home/xxx/tinyos-main，已确认环境变量已经生效

配置环境变量

编译例程

```
#进入tinyos安装目录:  
cd $TOSROOT  
cd apps  
#选择一个需要编译的程序  
cd Blink  
#编译  
make telosb
```

显示...compiled BlinkAppC to build/telosb/main.exe ...说明编译成功

TinyOS Tutorials

http://tinyos.stanford.edu/tinyos-wiki/index.php/TinyOS_Tutorials

TOSSIM TinyOs 仿真器

<http://tinyos.stanford.edu/tinyos-wiki/index.php/TOSSIM>